



Dean K. Matsuura
Manager
Regulatory Affairs

April 7, 2009

PUBLIC UTILITIES
COMMISSION

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The Honorable Chairman and Members of
the Hawaii Public Utilities Commission
Kekuanaoa Building, First Floor
465 South King Street
Honolulu, Hawaii 96813

Dear Commissioners:

Subject: Docket No. 2008-0083
HECO 2009 Test Year Rate Case
HECO's Responses to Consumer Advocate and DOD Information Requests

Enclosed are nine sets (each set consisting of ten binders) of Hawaiian Electric Company, Inc.'s ("HECO" or "Company") non-voluminous responses to the Consumer Advocate's and the Department of Defense's ("DOD") information requests. Also enclosed are electronic copies of the responses in portable document format ("PDF") on compact disc. The Company has responded to all information requests submitted by other parties in this proceeding.

Certain responses contain confidential information which the Company is providing subject to the terms of the Protective Order approved on November 21, 2008 in this proceeding.

The Company will submit voluminous responses to the information requests under separate cover. Due to the number of pages required for the voluminous responses to the Consumer Advocate's information requests, it will take a few additional days for the Company to print and file these responses.

Very truly yours,

Enclosures

cc: Division of Consumer Advocacy (w/o enclosures)
Dr. Kay Davoodi, Department of Defense (w/o enclosures)
James N. McCormick, Department of Defense (w/o enclosures)

CA-IR-1

For each of the HECO witnesses who sponsor test period budgeted labor direct expense amounts, please provide the following information:

- a. Identify each employee involved in preparation of budgeted staffing and associated labor direct expense amounts included in the witnesses' portion of the rate case test period budget.
- b. Provide complete copies of all calculations, spreadsheet files, "pencil" workpapers, surveys and other analyses performed by each of the employees identified in response to part (a) above, documenting all work done to determine required staffing levels and overtime hours by Department, RA, Activity and NARUC Account.
- c. Describe the actual force level that existed at the date the budget was prepared or otherwise served as a base for purposes of preparing the budget level.
- d. For each budgeted employee position that is added to existing actual force levels (as of the date the budget was prepared), **explain** the analyses undertaken to determine that each added position was necessary and should be filled in order to meet present or anticipated work requirements. Also, please explain how the anticipated work requirements were defined and determined.
- e. Describe and, to the extent possible, quantify the backlog of work, unfinished projects, deferred maintenance and other labor requirements unfulfilled at present staffing levels, that will be satisfied by adding the employee positions identified in your response to part (d) above.
- f. Provide complete copies of all studies, analyses, workpapers, projections, notes, correspondence, assumptions and other documents associated with your responses to parts (d) and (e) above.

HECO Response:

The requested information is voluminous and available for inspection at HECO's Regulatory Affairs Division office, Suite 1301, Central Pacific Plaza, 220 South King Street, Honolulu, Hawaii. Please contact Dean Matsuura at 543-4622 to make arrangements to inspect the requested information. An electronic version of the requested information is being provided on a compact disc.

CA-IR-2

For each of the HECO witnesses who sponsor test period budgeted non-labor direct expense amounts, please provide the following information:

- a. Identify each employee involved in preparation of budgeted non-labor direct expense amounts included in the rate case test period budget and sponsored by the witness.
- b. Provide complete copies of all calculations, spreadsheet files, "pencil" workpapers, surveys and other analyses performed by each of the employees identified in response to part (a) above, indicating the amounts by Department, RA, Activity and NARUC Account that such calculations support.
- c. For each budgeted non-labor amount in the test period forecast that exceeds \$50,000, please describe the basis for determining the budgeted amount (for example, bid solicitation, price times quantity estimation, historical cost escalated, etc.)
- d. For each item in your response to part (c) above, where specific quantities and prices were discretely forecasted, explain the basis for and source of the budgeted quantity inputs and budgeted prices for each such item. Provide complete copies of all studies, reports and other documents that were relied upon.
- e. For each item in your response to part (c) above where historical costs were averaged and/or escalated, provide all historical cost information that was considered and explain how such data was evaluated and escalated to derive test year proposed levels.
- f. For each item in your response to part (c) above where a bid solicitation or other special analysis was conducted, explain what was done and provide complete copies of all supporting reports, bid solicitations, proposal, analyses, workpapers and other documents associated with such efforts.
- g. Provide complete copies of all other information required to completely support and document the test year projected expense levels being proposed by the Company, including general assumptions and forecasting instructions that were employed.

HECO Response:

The requested information is voluminous and available for inspection at HECO's Regulatory Affairs Division office, Suite 1301, Central Pacific Plaza, 220 South King Street, Honolulu, Hawaii. Please contact Dean Matsuura at 543-4622 to make arrangements to inspect the requested information. An electronic version of the requested information is being provided on a compact disc.

CA-IR-3

To the extent not provided in response to CA-IR-1 or CA-IR-2, please provide complete copies of all other calculations, spreadsheet files, “pencil” workpapers, surveys, documentation and other analyses supporting each ratemaking adjustment (e.g., budget adjustments, normalizing adjustments, etc.) to projected test year expense, plant in service, accumulated depreciation, etc. being proposed by the Company, including any assumptions and adjustment instructions that were employed.

HECO Response:

Budget and normalization adjustments for Other Production O&M expenses are shown on HECO-734 and HECO-735. The references for documents supporting each adjustment are summarized on pages 2 and 3 of this response. The workpaper supporting the decrease of \$58,000 due to the elimination of the expense of one security officer charging to Other Production Operations Labor expense is provided on page 4.

Hawaiian Electric Company, Inc.

2009 Test Year

Other Production O&M Expenses Budget Adjustments and Normalization References (HECO-734 and HECO-735)

CA-IR-3

DOCKET NO. 2008-0083

HECO T-7

PAGE 2 OF 4

Adjustment		Amount (\$ Thousands)	Reference
Performance Incentive	Operations Non-Labor	(\$386)	HECO T-11, Page 10, and HECO-1104; CA-IR-3, HECO T-11, Attachment 1, Page 2.
Air Quality Monitoring Stations	Operations Labor	\$83	CA-IR-1, HECO T-14, Attachment 1 and 9 (Project P0001170).
	Operations Non-Labor	\$72	CA-IR-2, HECO T-14, Attachment 1 (Project P0001170), and CA-IR-1, HECO T-14, Attachment 9. Budgeted amount represents the annual cost of materials of an air quality monitoring station for the proposed Air Monitoring Program, which are part of the community benefits package relating to HECO's 2009 Campbell Industrial Park generating unit (Docket No. 05-0146), approved by the Commission in D&O No. 23514, issued on June 27, 2007. The Air Monitoring Program will consist of three air quality monitoring stations (Page 4 of HECO T-4 of Docket No. 05-0146). Therefore, HECO will be proposing an adjustment, at the next available opportunity, to reflect an additional \$132K of material costs (\$65,906 x 2) in the rate case for two additional air quality monitoring stations. Refer to HECO's response to CA-IR-44 (of Docket No. 05-0146) for an annual itemized cost estimate of an air quality monitoring station.

Hawaiian Electric Company, Inc.

2009 Test Year

Other Production O&M Expenses Budget Adjustments and Normalization References (HECO-734 and HECO-735)

CA-IR-3

DOCKET NO. 2008-0083

HECO T-7

PAGE 3 OF 4

Adjustment		Amount (\$ Thousands)	Reference
Fish Monitoring	Operations Labor	\$4	CA-IR-1, HECO T-14, Attachment 1 and 10 (Project P0001168).
	Operations Non-Labor	\$23	CA-IR-2, HECO T-14, Attachment 1 (Project P0001168), and CA-IR-1, HECO T-14, Attachment 10.
Emission Fees	Operations Non-Labor	(\$89)	CA-IR-2, HECO T-7, Attachment 7B.
Reverse Osmosis Amortization	Operations Non-Labor	\$32	HECO T-11, Page 64 to 66.
	Maintenance Non-Labor	(\$32)	HECO T-11, Page 64 to 66.
Abandoned Projects	Operations Non-Labor	\$8	HECO T-11, Pages 59-62; HECO-1119.
	Maintenance Non-Labor	\$20	HECO T-11, Pages 59-62; HECO-1119.
Research and Development	Operations Non-Labor	(\$26)	HECO T-14, Page 32; CA-IR-2, HECO T-14, Attachment 1 and Attachment 6 (Project NPASVP7Z).
	Operations Non-Labor	\$356	HECO T-7, Page 93; HECO-740.
Security Personnel	Operations Labor	(\$58)	CA-IR-3, HECO T-7, Page 4.
Total Adjustments		\$7	
Normalization		Amount	Reference
IRP	Operations Non-Labor	(\$3)	HECO T-10, Page 61; HECO-1030 and HECO-1031.
Total Normalization		(\$3)	
Total Adjustment & Normalization		\$4	

Hours and Costs adjusted for PHS - Security
Hours & Figures taken from Pillar Report - Upd08RA-Apr08-Security.PLN *ENTER: Direct RA Cost

EMPLOYEE SUPPLY/HEAD COUNT												
RA	ACT	LOC	NE	EE	LAB	Item Description	9-Sep	9-Oct	9-Nov	9-Dec	FY 2009	10-Dec FY 2010
PHS	98	PHE	ND	107	J	Implementor	6	6	6	6	72	72
PHS	933	HST	NE	150	J	(Adjustment - Transfer to CE - VP Office)	-1	-1	-1	-1	-12	-12
PHS	933	WST	NE	150	J	Facilitator - Supv	4	4	4	4	48	48
PHS	933	WRD	NE	150	J	Teacher/Coach	10	10	10	10	120	120

EMPLOYEE SUPPLY/HEAD COUNT												
RA	ACT	LOC	NE	EE	LAB	Item Description	9-Sep	9-Oct	9-Nov	9-Dec	FY 2009	10-Dec FY 2010
PHS	98	PHE	ND	107	J	Implementor	6	6	6	6	72	72
PHS	933	HST	NE	150	J	(Adjustment - Transfer to CE - VP Office)	-1	-1	-1	-1	-12	-12
PHS	933	WST	NE	150	J	Facilitator - Supv	4	4	4	4	48	48
PHS	933	WRD	NE	150	J	Teacher/Coach	10	10	10	10	120	120

LABOR HOURS												
RA	ACT	LOC	NE	EE	LAB	Item Description	9-May	9-Jun	9-Jul	9-Aug	9-Sep	9-Oct
PHS	98	PHE	ND	107	J	NProd - Security Officer (VOP-PP)	11	3	19	3	11	19
PHS	933	HST	NE	150	J	Provide & Manage Svcs - (Sargent VPO-PP)	46	46	46	46	46	46
PHS	933	WST	NE	150	J	Provide & Manage Svcs - (Sargent VPO)	40	40	40	40	40	40
PHS	933	WRD	NE	150	J	Provide & Manage Svcs (Sargent VOP-2)	117	111	122	111	117	122
							214	200	227	200	214	227

LABOR HOURS - Continued												
RA	ACT	LOC	NE	EE	LAB	Item Description	9-Sep	9-Oct	9-Nov	9-Dec	FY 2009	FY 2010
PHS	98	PHE	ND	107	J	NProd - Security Officer (VOP-PP)	8	8	16	96	184	192
PHS	933	HST	NE	150	J	Provide & Manage Svcs - (Sargent VPO-PP)	168	168	152	88	1,904	1,896
PHS	933	WST	NE	150	J	Provide & Manage Svcs - (Sargent VPO)	0	0	0	0	0	0
PHS	933	WRD	NE	150	J	Provide & Manage Svcs (Sargent VOP-2)	176	176	168	184	2088	2088

Non-Productive Work = \$5 X 1904 = \$9,520

LABOR COSTS												
RA	ACT	LOC	NE	EE	LAB	Item Description	9-May	9-Jun	9-Jul	9-Aug	9-Sep	9-Oct
PHS	98	PHE	ND	107	J	NProd - Security Officer (VOP-PP)	\$267.96	\$73.08	\$462.84	\$73.08	\$267.96	\$462.84
PHS	933	HST	NE	150	J	Provide & Manage Svcs - (Sargent VPO-PP)	\$1,116.50	\$1,116.50	\$1,116.50	\$1,116.50	\$1,116.50	\$1,116.50
PHS	933	WST	NE	150	J	Provide & Manage Svcs - (Sargent VPO)	\$974.40	\$974.40	\$974.40	\$974.40	\$974.40	\$974.40
PHS	933	WRD	NE	150	J	Provide & Manage Svcs (Sargent VOP-2)	\$2,706.67	\$2,977.33	\$2,977.33	\$2,706.67	\$2,842.00	\$2,977.33
							\$5,200.86	\$5,531.07	\$4,870.65	\$5,200.86	\$5,531.07	\$4,870.65

LABOR COSTS - Continued												
RA	ACT	LOC	NE	EE	LAB	Item Description	9-Sep	9-Oct	9-Nov	9-Dec	FY 2009	FY 2010
PHS	98	PHE	ND	107	J	NProd - Security Officer (VOP-PP)	\$202.80	\$202.80	\$405.60	\$2,433.60	\$4,664.40	\$5,086.98
PHS	933	HST	NE	150	J	Provide & Manage Svcs - (Sargent VPO-PP)	\$4,258.80	\$4,258.80	\$3,853.20	\$2,230.80	\$4,258.80	\$50,225.04
PHS	933	WST	NE	150	J	Provide & Manage Svcs - (Sargent VPO)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PHS	933	WRD	NE	150	J	Provide & Manage Svcs (Sargent VOP-2)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
							\$4,461.60	\$4,461.60	\$4,258.80	\$4,664.40	\$52,330.80	\$55,311.12

Direct Cost = \$48,266
Non-Productive Work = \$9,520
Total Adjustment = \$57,786

CA-IR-3

To the extent not provided in response to CA-IR-1 or CA-IR-2, please provide complete copies of all other calculations, spreadsheet files, “pencil” workpapers, surveys, documentation and other analyses supporting each ratemaking adjustment (e.g., budget adjustments, normalizing adjustments, etc.) to projected test year expense, plant in service, accumulated depreciation, etc. being proposed by the Company, including any assumptions and adjustment instructions that were employed.

HECO Response:

As noted in Mr. Robert Young’s testimony, HECO T-8, page 10, and detailed in HECO-WP-810, there were three budget adjustments to projected T&D O&M test year expense.

The references for each of these adjustments are as follows:

1. Increase for abandoned projects cost of \$133,000: HECO T-11, Pages 59-62, and HECO-1119;
2. Decrease of restricted stock awards cost of \$8,000: HECO T-11, Page 10, and HECO-1104; response to CA-IR-3, HECO-T-11, page 2; and
3. Decrease of performance incentive cost of \$202,000: HECO T-11, Page 10, and HECO-1104; response to CA-IR-3, page 2.

CA-IR-3

To the extent not provided in response to CA-IR-1 or CA-IR-2, please provide complete copies of all other calculations, spreadsheet files, “pencil” workpapers, surveys, documentation and other analyses supporting each ratemaking adjustment (e.g., budget adjustments, normalizing adjustments, etc.) to projected test year expense, plant in service, accumulated depreciation, etc. being proposed by the Company, including any assumptions and adjustment instructions that were employed.

HECO Response:

As stated in Mr. Darren Yamamoto’s testimony, HECO-T-9, pages 5 and 6, two adjustments were made to the Account 903 budget amount. The first adjustment resulted in a decrease of \$48,000 in non-labor expense for the CIS amortization in 2009 and can be found on Attachment 1. The second adjustment resulted in an increase of \$13,000 in non-labor expense for the revised CIS vendor and consultant costs in 2009 can be found on Attachment 2. Both of these adjustments were made based on the latest information provided in the CIS Notification Filing to the PUC on July 1, 2008.

CIS Amortization in Rate Case Report

_Proj	Dept	_RA	NARUC	_Act	Exp Type	_EE	FY09	9-Jun	9-Jul	9-Aug	9-Sep	9-Oct	9-Nov	9-Dec
NPCCZZZZZ	Cust Svc	PCA	903	600	Non-Labor	901	\$1,024,719	\$123,404	\$127,539	\$127,662	\$137,350	\$169,588	\$169,588	\$169,588

CIS Amortization Revised based on HECO's CIS Notification Filing submitted to the Commission on July 1, 2008

_Proj	Dept	_RA	NARUC	_Act	Exp Type	_EE	FY09	9-Jun	9-Jul	9-Aug	9-Sep	9-Oct	9-Nov	9-Dec
NPCCZZZZZ	Cust Svc	PCA	903	600	Non-Labor	901	\$976,939	\$110,767	\$112,478	\$112,601	\$142,190	\$166,301	\$166,301	\$166,301
Total decrease for CIS Amortization							-\$47,780	-\$12,637	-\$15,061	-\$15,061	\$4,840	-\$3,287	-\$3,287	-\$3,287

Reference: Based on latest estimated deferred costs provided in the CIS Notification Filing to PUC on July 1, 2008, Attachment 1.

RATE CASE BUDGET							Annual 2009 Budget
*Project #	*RA #	*Act #	*Loc #	*Ind #	*EE #	Line item/Consultant	
P0000571	PCA	600	OAH	NE	501	MOSIAC	\$101,850
P0000571	PCA	600	OAH	NE	501	PEACE	\$241,160
P0000571	PCA	600	OAH	NE	501	BASS	\$108,987
P0000571	PCA	600	OAH	NE	501	TYC	\$46,172
P0000571	PCA	600	OAH	NE	501	ADS	\$6,366
					501	Total O/S Svcs	\$504,535
P0000571	PCA	600	OAH	NE	462	Toad License (SAR repl)	\$2,774
Total Rate Case Direct Non-Lbr Budget							\$507,309

Adjusted Rate Case Budget based on "CIS Notification Filing" July 1, 1008

*Project #	*RA #	*Act #	*Loc #	*Ind #	*EE #	Line item/Consultant	
P0000571	PCA	600	OAH	NE	501	MOSAIC	\$106,991
P0000571	PCA	600	OAH	NE	501	PEACE	\$241,169
P0000571	PCA	600	OAH	NE	501	BASS	\$126,017
P0000571	PCA	600	OAH	NE	501	TYC	\$30,555
P0000571	PCA	600	OAH	NE	501	ADS	\$12,732
					501	Adjusted Rate Case Budget	\$517,464
P0000571	PCA	600	OAH	NE	462	Toad License (SAR repl) (IT software purchase)	\$2,774
Total Adj. Rate Case Direct Non-Lbr Budget							\$520,238

Adjustments made in the "CIS Notification Filing" to the PUC July 1, 2008

*Project #	*RA #	*Act #	*Loc #	*Ind #	*EE #	Line item/Consultant	
P0000571	PCA	600	OAH	NE	501	MOSIAC	\$5,141
P0000571	PCA	600	OAH	NE	501	PEACE	\$9
P0000571	PCA	600	OAH	NE	501	BASS	\$17,030
P0000571	PCA	600	OAH	NE	501	TYC	-\$15,617
P0000571	PCA	600	OAH	NE	501	ADS	\$6,366
Total O/S Svc Adjustments							\$12,929

Reference: CIS Notification to PUC on July 1, 2008, Attachment 5.

CA-IR-3

To the extent not provided in response to CA-IR-1 or CA-IR-2, please provide complete copies of all other calculations, spreadsheet files, “pencil” workpapers, surveys, documentation and other analyses supporting each ratemaking adjustment (e.g., budget adjustments, normalizing adjustments, etc.) to projected test year expense, plant in service, accumulated depreciation, etc. being proposed by the Company, including any assumptions and adjustment instructions that were employed.

HECO Response:

Rate Case Adjustments

(1) Removal of Stock Award:

An adjustment to remove approximately \$5,000 of restricted stock awards was made from Account 909. See HECO T-10, Page 5 of 79 and HECO-1006. The stock award amount is shown in CA-IR-2, Attachment A (Account 909, RA=P1W, Activity 700, Expense Element=901(Amoritization-Def Debit)).

(2) Removal of incremental DSM expenses:

Refer to HECO T-10, pages 5-8, HECO-1007 and HECO-1008 for the breakdown of the DSM rate case adjustment for the removal of incremental DSM program expenses of \$20,678,000. The DSM rate case adjustment removes incremental DSM program costs from the test year expenses because they are recovered through the DSM surcharge.

Support for the incremental DSM program expenses initially included in the 2009 Budget can be found at CA-IR-1 (Labor) and CA-IR-2 (Nonlabor) by referring to Attachment C (Act. 714 transactions only).

(3) Addition of an incremental Customer Efficiency Programs (“CEP”) Analyst position into base ESD DSM labor:

Refer to HECO T-10, Page 8 of 79 for a discussion of this adjustment.

The O&M impact of the removal of the incremental DSM position to NARUC 910 is addressed in (2) above.

The impact to Account 910 of adding in a base O&M position results in an increase of approximately \$103,000 (labor - \$72K, on-costs - \$31K) as indicated per HECO-1006, line 16. Refer to pages 4 to 6 for relevant supporting documentation.

(4) Removal of a vacant Senior Technical Engineer position in the Customer Technology Applications Division that is being transferred to the Pricing Division as a Senior Rate Analyst

Refer to HECO T-10, Pages 9-11 for a discussion of this adjustment.

The CTAD Senior Technical Engineer transferred position was included in the initial 2009 Budget and supporting documentation for this position can be found at CA-IR-1. NARUC 910 costs were accordingly reduced for this eliminated position.

The Senior Rate Analyst is a new position and forecasted dollars were increased for these additional hours. While most of the increase went to Account 920, some labor increases were made to Account 910 to accommodate some DSM program support.

The net O&M impact to NARUC 910 of the above transfer was a reduction of approximately \$103,000 as indicated per HECO-1006, line 17. (labor - \$72K, on-costs - \$31K). Refer to pages 7 to 11 for relevant supporting documentation.

Normalization Adjustments

PCEA Conference:

Refer to HECO-1010 for computation of 2009 PCEA Conference normalization adjustment. Hardcopy support for non-labor amounts noted in Column A can be found at CA-

IR-2 under the respective NARUC account and Responsibility Area (RA). As indicated per HECO T-10, page 11 of 79, the estimated \$119,000 of PCEA related meeting costs were averaged over two years since the event is only held once every two years. A \$60,000 normalization adjustment to reduce Customer Services O&M was then made as indicated in HECO-1005 and HECO-1009.

In addition to the above, approximately \$64,000 in PCEA related revenue was included in the 2009 O&M Expense Budget. This revenue was also normalized for test year purposes and only \$32,000 in test year revenue is being included in Miscellaneous Other Operating Revenue per HECO-304. Please see HECO T-10, page 12 of 79 and HECO T-3 page 10 of 10, for further discussion of 2009 PCEA revenues.

IRP Non-Labor:

As indicated per HECO T-10, page 61 of 79, HECO IRP Non-labor costs are normalized using an average of three years. Refer to HECO-1031 for derivation of the 2009 IRP Non-labor normalization adjustment of \$173,400 and to HECO-1030 for the allocation of the \$173,400 normalized amount to various NARUC accounts. The normalization adjustment was allocated to the three identified account areas based on the percentage held by each area's IRP non-labor costs in relation to the total IRP non-labor costs. HECO-1030 line 2 reflects a Customer Services allocated amount of approximately \$67,000, or approximately 38.7% of the normalized adjustment, based on \$228,500 (38.7% of the total 2009 IRP non-labor budget) in budgeted Customer Services IRP Non-labor costs. Hardcopy support for the \$228,500 non-labor amounts noted per line 2 can be found at CA-IR-2 under Attachment B (RA- PSM, Activity 711 [Admin. & Impl IRP Prgm – Base]). The \$67,000 normalization adjustment to reduce Customer Services O&M is indicated in HECO-1005 and HECO-1009.

DSM Position
Add DSM Base Position
CA-IR-3

09 TY O&M impact of Transferred SD Position							
Moves one Incremental DSM position back to Base				LABOR		SUBJECT TO GL TRANSFER	
	Hours	Rate	\$\$\$ Labor Impact (Dec) Inc (EE 150)	NPW Impact (\$5.00/hr) (EE #421)	Payroll Tax Impact (8.29%) (EE #423)	Employee Benefits (\$10.83/hr) (EE #422)	Corp Admin (\$3.97/hr) (EE #406)
Transfer of SD CEP Analyst							
Impact to ACTIVITY 713							
CEP Analyst							
DSM hours	1,808	\$34.70	<u>\$62,737.60</u>	<u>\$9,040.00</u>	<u>\$5,200.95</u>	<u>\$19,580.64</u>	<u>\$7,177.76</u>
			}				
			<u>\$71,777.60</u>			<u>\$31,959.35</u>	
NET IMPACT TO ACTIVITY 713							
Recap							
Labor	\$71,777.60						
Nonlabor	<u>\$31,959.35</u>						
	<u>\$103,736.95</u>						

Labor09_EWBasePos_Adj2.xls
SD transfer 2009 Hours
7/8/2008

<u>Match up of Hours -- CEP Analyst</u>			
	CEP Analyst	CEP Analyst	
	714	713	
	<u>2009*</u>	<u>2009</u>	
	<u>(A)</u>	<u>(B)</u>	
Total hours	2,088	2,088	
Holidays	(104)	104	
Vacation	(160)	160	
<u>Customer Services Block Impact</u>			
<u>DSM Work</u>			
CIEE	(323)		
CINC	(323)		
CICR	(323)		
REWH	(307)		
ESH	(322)		
CIDLC		512	Account 910 O&M Impact
RDLC		512	
Base default - nonprogram		784	
	(1,598)	1,808	
<u>Others</u>			
CIS Work	16	16	Net =0
* Covered in incremental DSM Expenses Adjustment removal			

CTAD F year to
Senior Analyst
(ADJ 3)

09 TY O&M Impact of Transferred Positions									
Impact to NARUC 910:		LABOR		SUBJECT TO TRANSFER					
		Hours	Rate	SSS Labor Impact (EE 150)	NPW Impact (\$5.00/hr) (EE #421)	Payroll Tax Impact (8.25%) (EE #423)	Employee Benefits (\$10.83/hr) (EE #422)	Corp Admin (\$3.97/hr) (EE #406)	
CTAD Senior Tech Engineer Elimination									
Reduction to CIDLC Base DSM Prgm Costs									
due to elimination of CTAD Senior Tech Engineer position									
		(1,806)	\$34.70	① (\$62,668.20)	① (\$9,030.00)	② (\$5,195.19)	③ (\$19,558.98)	④ (\$7,169.82)	
Reduction to other O&M activities due to elimination of CTAD Senior Tech Engineer position									
		(26)	\$34.70	③ (\$902.20)	③ (\$130.00)	④ (\$74.79)	④ (\$281.58)	④ (\$103.22)	
Senior Rate Analyst - New Position/New Hours									
Base DSM Program Work:									
HECO - CCR		5	\$34.70	\$173.50	\$25.00	\$14.38	\$54.15	\$19.85	
HECO - CIE		5	\$34.70	\$173.50	\$25.00	\$14.38	\$54.15	\$19.85	
HECO - CINC		5	\$34.70	\$173.50	\$25.00	\$14.38	\$54.15	\$19.85	
HECO - REWH		5	\$34.70	\$173.50	\$25.00	\$14.38	\$54.15	\$19.85	
HECO - RNC		25	\$34.70	\$867.50	\$125.00	\$71.92	\$270.75	\$99.25	
				① (\$62,702.90)	① (\$9,035.00)	② (\$5,198.07)	② (\$19,569.81)	② (\$7,173.79)	
NET IMPACT TO 910 ACCOUNT									
				① (\$71,737.90)			① (\$31,941.67)		
Impact to NARUC 920:									
Senior Rate Analyst - New Position/New Hours									
Additional Pricing Support Hours									
		1,615	\$34.70	\$56,040.50	\$8,075.00	\$4,845.76	\$17,490.45	\$6,411.55	
NET IMPACT TO 920 ACCOUNT									
Labor Difference = (\$7,622.40)									
				\$64,115.50			\$28,547.76		
Impact to other NARUC Areas - NET									
					③ (\$3,393.91)	③ (\$552.31)	③ (\$2,079.36)	③ (\$762.20)	
<div> <div> <div>① (\$77,057.71)</div> <div>② (\$31,482.07)</div> <div>③ (\$1,032.20)</div> <div>④ (\$4,891.77)</div> <div>⑤ (\$71,737.91)</div> </div> <div> <div>① (\$62,702.90)</div> <div>② (\$9,035.00)</div> <div>③ (\$71,737.90)</div> </div> <div> <div>① (\$62,668.20)</div> <div>② (\$9,030.00)</div> <div>③ (\$902.20)</div> <div>④ (\$74.79)</div> <div>⑤ (\$62,702.90)</div> </div> <div> <div>① (\$56,040.50)</div> <div>② (\$8,075.00)</div> <div>③ (\$3,393.91)</div> <div>④ (\$4,891.77)</div> <div>⑤ (\$71,737.91)</div> </div> <div> <div>① (\$7,622.40)</div> <div>② (\$4,845.76)</div> <div>③ (\$2,079.36)</div> <div>④ (\$28,547.76)</div> <div>⑤ (\$64,115.50)</div> </div> </div>									

DSM Base Impact
Other

Labor J:\TADvsPricing.xls
 2009 Hours
 5/19/2008

<u>Match up of Hours -- CTAD Enginner vs. Senior Rate Analyst</u>				
	CTAD Eng	Senior Analyst		
	2009	2009	Difference	
	(A)	(B)	(A)-(B)	
Total hours	2,088	2,088	0	
Holidays	(104)	(104)	0	
Vacation	(120)	(80)	(40)	
O&M Work				
CIS Replacement - 586	(32)	(32)	0	Net = 0
Base DSM Work-910	(1,806)	(25)	(1,781)	
Other O&M - 910	(26)	0	(26)	
	(1,832)	(25)	(1,807)	910 HOUR IMPACT DEC.
Other O&M - 920	0	(1,615)	1,615	920 HOUR IMPACT INCREASE
	(1,864)	(1,672)	(192)	
Billable				
DSM	0	(40)	40	
Pricing	0	(192)	192	
	0	(232)	232	
Net	0	0	0	

Page 2

LABOR INPUT SHEET
2009 Part 2

Employee Class.....	Teacher/Coach (Senior Rate Analyst)
Description.....	Pricing Division

[illegible][illegible]

• Required Data Entry Field

Column should be all zeros. (Available hours = Forecast hours)

If numbers other than zero appear, recheck work.

HECO-DSM O&M

Labor Sheets 2009 Senior Rate Analyst.xls Sheet 2009 TC2

6/2/2008 10:56 AM

CA-IR-3

To the extent not provided in response to CA-IR-1 or CA-IR-2, please provide complete copies of all other calculations, spreadsheet files, “pencil” workpapers, surveys, documentation and other analyses supporting each ratemaking adjustment (e.g., budget adjustments, normalizing adjustments, etc.) to projected test year expense, plant in service, accumulated depreciation, etc. being proposed by the Company, including any assumptions and adjustment instructions that were employed.

HECO Response:

Budget and normalization adjustments for A&G expenses are shown on HECO-WP-1102. The support for the adjustments (Adjustments A-J) is provided as follows:

- Adjustment A Please see HECO-1107, page 7. The adjustment of \$272,000 is the total adjustment for Account No. 921 shown on HECO-1107, page 7.
- Adjustment B Please see Attachment 1, page 1 for the budgeted amounts for restricted stock by account number, RA, and activity. Amounts related to Account Nos. 920, 921 and 9302 are reflected as adjustments to the budget as shown on HECO-WP-1102.
- Adjustment C Please see Attachment 1, page 2 for the budgeted amounts for performance incentive compensation plans (LTIP/EICP/Merit Key/Merit Team) by account number, RA, and activity. Amounts related to Account No. 920 are reflected as an adjustment to the budget as shown on HECO-WP-1102.
- Adjustment D Please see HECO-1119.
- Adjustment E Support for reclassified maintenance expenses is provided in response to CA-IR-1, HECO T-11, Attachments 18 and 42 and CA-IR-2, HECO T-11, Attachments 19 and 42.
- Adjustment F Please see Attachment 1, page 2 for the budgeted amounts for service awards by account number, RA, and activity. Amounts related to Account Nos. 920

and 921 are reflected as adjustments to the budget as shown on
HECO-WP-1102.

Adjustment G The adjustment to include a senior rate analyst is discussed by Mr. Alan Hee in HECO T-10. See Attachment 1, pages 3 and 4 for the calculation of the labor cost for a new senior rate analyst.

Adjustment H The IRP non-labor normalization adjustment calculation is discussed by Mr. Alan Hee in HECO T-10, and the calculations are provided in HECO-1030 and HECO-1031.

Adjustment I The cost for the HR Suite project is discussed by Ms. Julie Price in HECO T-13. See Attachment 1, pages 5 and 6 for the revised amortization expense for 2009. The budgeted 2009 amortization of HR Suites deferred costs was \$234,672. The difference of \$34,000 is reflected on HECO-WP-1102.

Adjustment J For the adjustments in column J related to A&G transferred (Account 922), please see HECO-1111. The adjustment of \$290,000 is required to adjust the amount included in the budget of (\$3,487,000) to the test year estimate of (\$3,197,000) as calculated on HECO-1111. The adjustment is required due to other adjustments made to Account Nos. 920 and 921. For the adjustment related to Account No. 926020, see HECO-1112. For other adjustments in column J, please see the other A&G expense witnesses (i.e., Mr. Russell Harris, HECO T-12, for Account Nos. 924 and 925, Ms. Julie Price, HECO T-13 for Account Nos. 926000 and 926010, and Mr. Bruce Tamashiro, HECO T-14, for Account Nos. 928, 9302, 931, and 932).

NARUC	Inter	Cor	Acct	RA	Act	Loc	Ind	Proj	EE	Line item	FY09
560			560	P2V	307	OAH	NE	NPAVP2ZZ	901	Restricted Stock Award - HK	8,163.96
909			909	P1W	700	PHE	NE	NPASVP7Z	901	P1W: Restricted Stock Option	4,899.00
920			920	P1V	752	PHE	NE	NPAVP1ZZ	901	Restricted Stock Award	3,264.00
920			920	P3V	700	PHE	NE	NPAVP3ZZ	901	Exec-Amortization of Restricted Stock Options	8,164.00
920			920	P4V	700	PHE	NE	NPAVP4ZZ	901	Exec-Restricted Stock Award (TSekimura/MEgged)	11,430.00
920			920	P5V	700	PHE	NE	NPAVP5ZZ	901	SAL - Amortization of Stock Options	4,410.00
920			920	P6V	700	PHE	NE	NPAVP6ZZ	901	Restricted Stock Award - AD000248 (6/14/07 upd)	4,899.00
920			920	P7V	700	PHE	NE	NPAVP7ZZ	901	Restr Stock Option	8,164.00
920			920	P9P	700	PHE	NE	NPAPRESI	901	Restricted Stock Options	182,189.00
920			920	P9S	700	PHE	NE	NPASVP7Z	901	Restricted stock award	16,328.00
920			920	P9V	700	PHE	NE	NPASVP9Z	901	RESTRICTED STOCK	16,320.00
920			920	P9W	700	PHE	NE	NPASEVPZ	901	Restricted Stock Options	113,869.00
920			920	PAA	815	PHE	NE	NPAZZZZZ	901	Restricted Stock	3,276.00
										Total NARUC 920	372,313.00
921			921	P8V	700	PHE	NE	NPASVP8Z	901	Stock amortization	16,332.00
9302			9302	PKB	826	PHE	NE	NPKZZZZZ	901	Restricted Stock Award (LAN)	3,266.00
TOTAL RESTRICTED STOCK											<u>404,973.96</u>

Adjustments for LTIP/EICP/Merit
Service Awards

NARUC	Inter Code	RA	Act	Loc	Ind	Proj	EE	Line Item	FY09
<u>EICP/LTIP/Merit</u>									
506	506030	PFC	723	PPO	NE	NPFZZZZZ	900	Production Merit Key Contributor Awards	258,000.00
506	506030	PFC	723	PPO	NE	NPFZZZZZ	900	Production Merit Team Awards	128,000.00
									<u>386,000.00</u>
566		PFC	723	PTO	NE	NPFZZZZZ	900	Transmission Merit Key Contributor Awards	39,000.00
566		PFC	723	PTO	NE	NPFZZZZZ	900	Transmission Merit Team Awards	20,000.00
									<u>59,000.00</u>
588		PFC	723	PDO	NE	NPFZZZZZ	900	Distribution Merit Key Contributor Awards	95,000.00
588		PFC	723	PDO	NE	NPFZZZZZ	900	Distribution Merit Team Awards	48,000.00
									<u>143,000.00</u>
920		P8M	723	PHE	NE	NPZZZZZZ	900	EICP Expense	1,240,032.00
920		P8M	723	PHE	NE	NPZZZZZZ	900	LTIP Expense	1,123,524.00
									<u>2,363,556.00</u>
920		PFC	723	PHE	NE	NPFZZZZZ	900	Admin & Genl Merit Key Contributor Awards	168,000.00
920		PFC	723	PHE	NE	NPFZZZZZ	900	Admin & Genl Merit Team Awards	84,000.00
									<u>252,000.00</u>
								Total Account 920	<u>2,615,556.00</u>
<u>Service Awards</u>									
920		PPA	723	PHE	NE	NPPZZZZZ	150	Service Awards (CH)	6,084.00
921		PPA	723	PHE	NE	NPPZZZZZ	201	Service Awards	55,000.00
								Total Service Awards	<u>61,084.00</u>

**Senior Rate Analyst
O and M Impact - 920**

920 O&M IMPACT	Senior Rate Analyst			Source: Labor Input Sheet	
				<u>Hrs.</u>	<u>\$\$\$</u>
PSP-736-PHE-NE	HECO Tariff Dev.	Input Sheet TC3		336	\$11,659.20
PSP-736-PHE-NE	HECO Tariff Adm.	Input Sheet TC3		1,279	\$44,381.30
	Direct Labor	EE#150		1,615	\$56,040.50
	NPW @ \$5.00/hr.	EE\$421			\$8,075.00
					\$64,115.50

LABOR INPUT SHEET

2009 Part 3

Employee Class..... Teacher/Coach (Senior Rate Analyst)
Description..... Pricing Division

Responsibility Areas (RA)
Prepared by _____
Date _____

(A) Avail	(B)	(C)=A*B	Hrs in Month	No.* of Emp	Total Avail Hours	ST Rate	Dollar Amount	(Pricing O&M)				(BILLABLE)				(BILLABLE)				SPREAD
								Holiday Hours	No. of Emp	NPW (107)*	Dollar Amount	HOURS NPW(107)*	Dollar Amount	ST(101)*	Dollar Amount	Activity Location Indicator Project/WO EE #	736 MAU BE C00000597 150 MECO Billable - Tariff Dev. (PROJECT)	736 HEL BE C00000596 150 HELCO Billable - Tariff Dev. (PROJECT)	737 PHE NE NPSZZZZ 150 HECO Fuel Filings	
J	176	4	168	34.70	5,829.60	28	1	28	971.60	4	138.80	4	138.80	4	138.80	0	0.00	132		
F	160	4	152	34.70	5,274.40	28	1	28	971.60	4	138.80	4	138.80	4	138.80	0	0.00	116		
M	176	4	176	34.70	6,107.20	28	1	28	971.60	4	138.80	4	138.80	4	138.80	0	0.00	75		
A	176	4	168	34.70	5,829.60	28	1	28	971.60	4	138.80	4	138.80	4	138.80	0	0.00	132		
M	168	4	160	34.70	5,562.00	28	1	28	971.60	4	138.80	4	138.80	4	138.80	0	0.00	124		
J	176	4	168	34.70	5,829.60	28	1	28	971.60	4	138.80	4	138.80	4	138.80	0	0.00	132		
J	184	4	176	34.70	6,107.20	28	1	28	971.60	4	138.80	4	138.80	4	138.80	0	0.00	140		
A	168	4	120	34.70	4,164.00	28	1	28	971.60	4	138.80	4	138.80	4	138.80	0	0.00	84		
S	176	4	168	34.70	5,829.60	28	1	28	971.60	4	138.80	4	138.80	4	138.80	0	0.00	132		
O	176	4	168	34.70	5,829.60	28	1	28	971.60	4	138.80	4	138.80	4	138.80	0	0.00	132		
N	168	4	152	34.70	5,274.40	28	1	28	971.60	4	138.80	4	138.80	4	138.80	0	0.00	116		
D	184	4	128	34.70	4,441.60	28	1	28	971.60	4	138.80	4	138.80	4	138.80	0	0.00	92		
TOT	2088		1839		63,813.30	336		336	11,659.20	48	1,665.60	48	1,665.60			0	0.00	1407		

Total Hours Remain	to be Spread	Activity Location Indicator Project/WO EE #	ST(101)*	Dollar Amount	CIS O&M				CIS REPL PROJECT				MECO Billable Pricing				HECO Billable Pricing				HOURS NET TO BE SPREAD (be 0)
					ST(101)*	Dollar Amount	NPW (107)*	Dollar Amount	ST(101)*	Dollar Amount	NPW (107)*	Dollar Amount	ST(101)*	Dollar Amount	NPW (107)*	Dollar Amount	ST(101)*	Dollar Amount	NPW (107)*	Dollar Amount	
J	132	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
F	116	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
M	75	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
A	132	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
M	124	0	0	0.00	32	1,110.40	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
J	132	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
J	140	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
A	84	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
S	132	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
O	132	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
N	116	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
D	92	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
TOT	1407	0	0	0.00	32	1,110.40							48	1,665.60	48	1,665.60	48	1,665.60	48	1,665.60	0

* Required Data Entry Field
** Column should be all zeros. (Available hours = Forecast hours)
If numbers other than zero appear, recheck work.

HECO Pricing O&M
Pricing Billable
1615
192

HR Suites	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08	Nov-08	Dec-08
Apr-08									
Beg bal	19,719	708,063	999,742	1,189,998	1,678,038	1,881,625	2,042,410	2,345,100	2,640,285
ND	44,588	285,935	182,890	478,392	191,614	147,586	287,932	278,415	154,295
Rate	42,003	851,030	1,091,188	1,429,185	1,773,845	1,955,418	2,186,376	2,484,308	2,717,432
AFUDC	0.0000%	0.6750%	0.6750%	0.6750%	0.6750%	0.6750%	0.6750%	0.6750%	0.6750%
	192,141	5,744	7,366	9,647	11,973	13,199	14,758	16,769	18,343
									102,525

deferred added per Lynnette

① 3,618,039 total deferred costs

144

25,125 monthly amortization

8

② 201,002 May 09-Dec 09 amortization

forecast	2008	0.6750%
forecast	2009	0.6740%
forecast	2010	0.6740%
forecast	2011	0.6740%

	2007	Deferred	2008	2009
Cost		2,839,354	715,500	
AFUDC		102,525	89,616	
	71,043	2,741,879	805,117	3,618,039 ①

201,002 ②

Revised amortization per above
Budgeted per HECO-WP-101(G) Page 1023
Budget adjustment made

234,672
(33,670) rounded to (34,000)

HR Suites	Jan-09	Feb-09	Mar-09	Apr-09
Apr-09				
Beg bal	2,812,922	3,226,923	3,407,871	3,490,704
ND	393,715	158,664	59,663	103,459
	3,008,779	3,306,255	3,437,702	3,542,433
Rate	0.6740%	0.6740%	0.6740%	0.6740%
AFUDC	20,286	22,284	23,170	23,876
				89,616

CA-IR-3

To the extent not provided in reponse to CA-IR-1 or CA-IR-2, please provide complete copies of all other calculations, spreadsheet files, “pencil” workpapers, surveys, documentation and other analyses supporting each ratemaking adjustment (e.g., budget adjustments, normalizing adjustments, etc.) to projected test year expense, plant in service, accumulated depreciation, etc. being proposed by the Company, including any assumptions and adjustment instructions that were employed.

HECO Response:

All provided in CA-IR-1 and CA-IR-2.

CA-IR-3

To the extent not provided in response to CA-IR-1 or CA-IR-2, please provide complete copies of all other calculations, spreadsheet files, “pencil” workpapers, surveys, documentation and other analyses supporting each ratemaking adjustment (e.g., budget adjustments, normalizing adjustments, etc.) to projected test year expense, plant in service, accumulated depreciation, etc. being proposed by the Company, including any assumptions and adjustment instructions that were employed.

HECO Response:

Budget and other ratemaking adjustments are in HECO-1301, page 1, column h. The notes to each adjustment are included on page 2 with the applicable references.

CA-IR-3

To the extent not provided in response to CA-IR-1 or CA-IR-2, please provide complete copies of all other calculations, spreadsheet files, “pencil” workpapers, surveys, documentation and other analyses supporting each ratemaking adjustment (e.g., budget adjustments, normalizing adjustments, etc.) to projected test year expense, plant in service, accumulated depreciation, etc. being proposed by the Company, including any assumptions and adjustment instructions that were employed.

HECO Response:

Please see Attachment 1 for support of each ratemaking adjustment. All documentation has been provided in Exhibits as noted in Attachment 1 or in responses to CA-IR-1 and CA-IR-2.

Miscellaneous A&G Expenses
Summary Budget and Normalization Adjustments

NARUC	Reference	Budget Adjustment	Normalization Adjustment	Description
928	Exhibit HECO-1403, Page 1, Note (1)		(320)	Normalize 2009 TY nonlabor rate case expenses over 2-year period.
9302	Exhibit HECO-1404, Page 2, Note (1)	(7)		Remove disallowed AUW direct labor costs.
9302	Exhibit HECO-1404, Page 2, Note (2)	(8)		Adjust overstated budgeted direct labor costs.
9302	Exhibit HECO-1404, Page 2, Note (3)	(86)		Reclassify direct labor costs related to air and fish environmental monitoring programs to production O&M witness, Mr. Dan Giovanni's (HECO T-7)
9302	Exhibit HECO-1404, Page 2, Note (3)	(96)		Reclassify nonlabor costs related to air and fish environmental monitoring programs to production expense witness, Mr. Dan Giovanni's (HECO T-7)
9302	Exhibit HECO-1404, Page 4	(118)		Remove portion of EEI dues attributed to government lobbying and other activities.
9302	HECO T-14, Page 13 and HECO-1107, page 4 of Ms. Patsy Nanbu's (T-11) testimony.	(104)		Adjust intercompany BOD charges from HEI.
9302	HECO T-14, Page 13 and Mr. Bruce Tamashiro's (T-14) response to CA-IR-2, Attachment 7.	(3)		Remove restricted stock expenses.
9302	HECO T-14, Page 31 and Mr. Bruce Tamashiro's (T-14) response to CA-IR-2, Attachment 6.	26		Reclassify nonlabor costs related to long-term R&D from production O&M.
9302	Exhibit HECO-1406	49		Adjust R&D EPRI dues due to revised EPRI allocation calculation.
931	Exhibit HECO-1405, Note (2)	21		Increase rent of suites CPP 1250/1270.
931	Exhibit HECO-1405, Note (3)	15		Increase rent of ASB training rooms.
932	Exhibit HECO-1412, Note (1)	88		Reclassify direct labor charges related to Kings Street building repairs and maintenance work from Ms. Patsy Nanbu's (T-11) A&G testimony.
932	Exhibit HECO-1412, Note (2)	1,072		Reclassify nonlabor charges related to the Ward parking facility ramp repairs from Ms. Patsy Nanbu's (T-11) A&G testimony.
932	Exhibit HECO-1412, Note (3)		(188)	Normalize the non-recurring repairs and maintenance over a 3-year period.
	Exhibit HECO-1401	849	(508)	

CA-IR-3

To the extent not provided in response to CA-IR-1 or CA-IR-2, please provide complete copies of all other calculations, spreadsheet files, "pencil" workpapers, surveys, documentation and other analyses supporting each ratemaking adjustment (e.g., budget adjustments, normalizing adjustments, etc.) to projected test year expense, plant in service, accumulated depreciation, etc. being proposed by the Company, including any assumptions and adjustment instructions that were employed.

HECO Response:

With respect to the testimony of HECO T-16, the payroll taxes in HECO-WP-1601 were adjusted for: 1) Deletion of the Demand Side Management ("DSM") staff (a net removal of five employees) involved in incremental DSM programs as these expenses are recovered through the DSM Surcharge. This resulted in a reduction of \$27,000; and 2) An adjustment to reduce Safety, Security and Facilities ("SSF") staffing by one position, resulting in a reduction of \$4,000.

The DSM staffing and treatment (in base rates versus DSM Surcharge) are explained in Mr. Alan Hee's (T-10) direct testimony.

The SSF adjustment is to reduce staffing by one position. See Ms. Faye Chiogioji's (T-15) direct testimony.

Adjustments (Test Yr):	Payroll tax		\$ thousands
	Labor	oncost	
DSM staffing reduction	(322,884)	(26,767)	(27)
SSF staffing reduction	(48,266)	(4,001)	(4)
Total Adjustments to O&M	(371,150)	(30,768)	(31)

CA-IR-3

To the extent not provided in response to CA-IR-1 or CA-IR-2, please provide complete copies of all other calculations, spreadsheet files, “pencil” workpapers, surveys, documentation and other analyses supporting each ratemaking adjustment (e.g., budget adjustments, normalizing adjustments, etc.) to projected test year expense, plant in service, accumulated depreciation, etc. being proposed by the Company, including any assumptions and adjustment instructions that were employed.

HECO Response:

Rate base items presented in HECO T-18 are generally provided by other witnesses. These items may reflect ratemaking adjustments which are presented by the applicable witness in their testimony. Support for ratemaking adjustments has been provided in the workpapers supporting T-18 or will be provided by the applicable witness in their response to this IR.

CA-IR-4

Ref: HECO WP-2203 (Cost of Service Study)

To the extent not provided within any of the Company's electronic workpapers previously submitted, please provide complete copies (hard copy and excel files) of all functionalized studies, accounting classification studies, load studies, loss studies and other supportive analyses for the Company's class cost of service study.

HECO Response:

Copies of documents utilized in support of HECO-WP-2203 not previously submitted are attached to this response. See pages 2 through 90. In addition, electronic copies of spreadsheet files identified in this response are provided. See table below for the title of the spreadsheets and corresponding response pagination.

Line	Supporting Document	Response Page Nos.
1.	EXTSUMP w Pivot 06-26-08.xls	2 – 9
2.	revised file from Arvin.xls	10 – 12
3.	Depreciation__Amort_ITC by Function.xls	13
4.	CIAC and Customer Advances by Function.xls	14 – 17
5.	Gross Plant in Service Bal Est Reported.xls	18 – 19
6.	Depreciation Reserve by Function.xls	20 – 21
7.	RB Functionalization Unamot_ITC Reg Assets Def IncTx.xls	22
8.	Rev Req OM-direct.XLS	23 – 32
9.	HECO TY2009 COS Cust Allo Fct 6 Sch MinSys 06-25-08.xls	33 – 41
10.	HECO TY2009 COS Cust Allo Fct 8 Sch MinSys 06-25-08.xls	42 – 50
11.	COS_TY_2009_Data_Request_TO_CID returned 06-20-08.xls	78
12.	Acct 902-Meter Reading allocations 2009_R.Pytlarz_6-9-08.xls	79 – 82
13.	Acct 903-Cust Acct Exp allocations 2009_R.Pytlarz_6-9-08.xls	83 – 85
14.	CusAcct \$ Stats 2009TY_R.Pytlarz_6-09-08.xls	86
15.	Acct_904_Uncollectible_allocations_R.Pytlarz_6-09-08.xls	87

Item	HECO TY2009 Allocation Factors										Grand Total
	R	E	G	J-DP	J-DS	J-NTWK	J	H	PP	PS	F
Field Collection Charge Sum	81.0127%	6 Schedules 0.1670%	16.2800% 0.1084% 16.1716%	0.0000% 0.0000%	0.0000%	0.0000%	2.5403% 0.2528% 2.2875%	0.3612%	0.0000%	0.0000%	100.0000%
Late Payment Charge Sum	73.1443%	6 Schedules 0.1331%	11.6844% 0.2260% 11.4584%	0.4239% 0.0512%	0.0045%	13.0067% 0.5272% 12.4795%	0.7532%	0.4973%	0.1785%	0.8762%	100.0000%
Service Establishment Incl Reconnect Sum	94.2417%	6 Schedules 0.2195%	4.9277% 0.0288% 4.8989%	0.0012%	0.0000%	0.0004%	0.6076% 0.0673% 0.5403%	0.0961%	0.0000%	0.0019%	100.0000%
Returned Cheque Charge Sum	92.8602%	6 Schedules 0.1602%	5.2283% 0.0684% 5.1599%	0.0000%	0.0000%	0.0036%	1.7477% 0.1595% 1.5882%	0.2279%	0.0000%	0.0000%	100.0000%

CATEGORY		(All)											
Sum of TRAN AMOUNT													
TYP3	YEAR	SCH R	E	G	J-DP	J-DS	J-NTWK	J	H	PP	PS	F	Grand Total
Field Collection Charge	2003		68730	300	15900				2602.5	247.5			87780
	2004		46875	120	11010				1837.5	285			60127.5
	2005		56595	135	12255				1395	345			70725
	2006		69405	45	12697.5				1530	382.5			84060
	2007		71292.5	45	10597.5				1470	135			83540
Field Collection Charge Sum													
			312897.5	645	62460				8835	1395			386232.5
Late Payment Charge	2003		553069.25	1298.98	104792.14	4322.33	584.47		98781.95	6000.38	2197.83	522.05	780504.94
	2004		575006.36	1200.73	98377.13	3564.37	147.02	29.76	97821.76	6168.86	2097.87	2083.52	790663.79
	2005		636623.39	1200.33	100411.6	5621.08	535.36	98.95	110547.79	6151.08	866.97	1021.67	873852.95
	2006		739819.32	1178.19	103493.09	1734.35	370.61	29.99	125681.97	7688.39		1685.2	989367.78
	2007		723689.49	994.28	98638.24	3466.43	621.66	39.97	117946.86	7235.17	16785.02	2554.59	979090.61
Late Payment Charge Sum													
			3228207.81	5872.51	505712.2	18708.56	2259.12	198.67	550780.33	33243.88	21947.69	7877.03	4413480.07
Service Establishment Incl	2003		740461.6	2360	40798.33				4200	805		60	788684.93
	2004		703694.59	1915	37850				3935	815			748209.59
	2005		739202.04	1595	39010.21				4705	755		15	785282.25
	2006		745717.58	1335	37219.64	30		15	4265	790			789372.22
	2007		754744.5	1375	36616.55	15			4015	590			797356.05
Service Establishment Incl Reconnect S													
			3683820.31	8580	191494.73	45		15	21120	3755		75	3908905.04
Returned Cheque Charge	2003		34785	97.5	2527.5				795	120			38325
	2004		35550	60	1807.5				532.5	45			37995
	2005		36211	112.5	2325				585	75			39308.5
	2006		41392.5	37.5	1845			7.5	787.5	120			44190
	2007		47640	30	2362.5				645	120			50797.5
Returned Cheque Charge Sum													
			195578.5	337.5	10867.5			7.5	3345	480			210616
Grand Total			7420504.12	15435.01	770534.43	18753.56	2259.12	221.17	584080.33	38873.88	21947.69	7877.03	8919233.61

YEAR	RAT	CATEGORY	TYP	TRAN	AMOUNT	TRN CNT	SCH	Rate	Sch	
2003	E	FIELD COLL	FCC		\$270.00	18	E	E		
2003	E	LATE PMT	LP1		\$832.40	567	E	E1	E	
2003	E	SERVICE	RCS		\$225.00	9	E	F	F	
2003	E	RTN CHECK	RTC		\$90.00	14	E	F2	F	
2003	E	SERVICE	SVS		\$25.00	1	E	F6	F	
2003	E	SERVICE	SVY		\$1,750.00	116	E	G	G	
2003	E1	FIELD COLL	FCC		\$30.00	2	E	G1	G	
2003	E1	LATE PMT	LP1		\$466.58	351	E	G17	G	
2003	E1	SERVICE	RCS		\$75.00	3	E	G4	G	
2003	E1	RTN CHECK	RTC		\$7.50	1	E	GA	G	
2003	E1	SERVICE	SVS		\$15.00	1	E	GA4	G	
2003	E1	SERVICE	SVY		\$270.00	18	E	GD	G	
2003	F	LATE PMT	LP1		\$1,671.92	117	F	GDD	G	
2003	F2	LATE PMT	LP1		\$3,625.78	308	F	GNM	G	
2003	F2	SERVICE	SVY		\$60.00	4	F	H	H	
2003	F6	LATE PMT	LP1		\$3,637.86	230	F	J	J	
2003	G	FIELD COLL	FCC		\$14,055.00	949	G	J2	J-DS	put on secondary service
2003	G	LATE PMT	LP1		\$74,854.77	34482	G	J3	J-DP	
2003	G	SERVICE	RCS		\$5,250.00	215	G	J4	J-DS	
2003	G	SERVICE	RCY		\$390.00	28	G	J5	J-NTWK	
2003	G	RTN CHECK	RTC		\$1,987.50	269	G	JK2	J	
2003	G	SERVICE	SVS		\$3,930.83	176	G	JNM	J	
2003	G	SERVICE	SVY		\$27,132.50	1880	G	PP3	PP	
2003	GA	LATE PMT	LP1		\$24.84	10	G	PP6	PP	
2003	GA4	LATE PMT	LP1		\$14.85	14	G	PS	PS	
2003	GA4	SERVICE	SVY		\$15.00	1	G	R	R	
2003	GD	FIELD COLL	FCC		\$1,845.00	130	G	RDM	R	
2003	GD	LATE PMT	LP1		\$27,622.46	3504	G	RM	R	
2003	GD	SERVICE	RCS		\$425.00	17	G	RNM	R	
2003	GD	SERVICE	RCY		\$45.00	3	G	U3X	J	
2003	GD	RTN CHECK	RTC		\$540.00	72	G	VAR	VAR	
2003	GD	SERVICE	SVS		\$320.00	15	G	XXX	XXX	
2003	GD	SERVICE	SVY		\$3,215.00	219	G	(blank)	(blank)	
2003	GNM	LATE PMT	LP1		\$36.39	11	G			
2003	GNM	SERVICE	SVY		\$30.00	2	G			
2003	G1	LATE PMT	LP1		\$149.54	77	G			
2003	G4	LATE PMT	LP1		\$2,089.29	1306	G			
2003	G4	SERVICE	SVY		\$45.00	3	G			
2003	H	FIELD COLL	FCC		\$247.50	20	H			
2003	H	LATE PMT	LP1		\$6,000.38	1052	H			
2003	H	SERVICE	RCS		\$75.00	3	H			
2003	H	RTN CHECK	RTC		\$120.00	18	H			
2003	H	SERVICE	SVS		\$10.00	3	H			
2003	H	SERVICE	SVY		\$720.00	54	H			
2003	J	FIELD COLL	FCC		\$2,602.50	179	J			
2003	J	LATE PMT	LP1		\$98,630.93	6193	J			
2003	J	SERVICE	RCS		\$400.00	16	J			
2003	J	SERVICE	RCY		\$30.00	2	J			
2003	J	RTN CHECK	RTC		\$795.00	108	J			
2003	J	SERVICE	SVS		\$310.00	13	J			
2003	J	SERVICE	SVY		\$3,460.00	259	J			
2003	JK2	LATE PMT	LP1		\$5.09	1	J			
2003	JNM	LATE PMT	LP1		\$145.93	10	J			
2003	J2	LATE PMT	LP1		\$1.11	1	J-DS			
2003	J3	LATE PMT	LP1		\$4,322.33	27	J-DP			
2003	J4	LATE PMT	LP1		\$583.36	10	J-DS			
2003	PP6	LATE PMT	LP1		\$2,197.83	1	PP			
2003	PS	LATE PMT	LP1		\$522.05	4	PS			
2003	R	FIELD COLL	FCC		\$68,715.00	4658	R			
2003	R	LATE PMT	LP1		\$552,780.57	420215	R			
2003	R	SERVICE	RCS		\$116,527.50	4871	R			
2003	R	SERVICE	RCY		\$7,150.00	490	R			
2003	R	RTN CHECK	RTC		\$34,785.00	4850	R			
2003	R	SERVICE	SVS		\$55,732.58	2595	R			
2003	R	SERVICE	SVY		\$560,661.52	37822	R			
2003	RDM	LATE PMT	LP1		\$106.69	18	R			
2003	RDM	SERVICE	SVY		\$75.00	5	R			
2003	RM	FIELD COLL	FCC		\$15.00	1	R			
2003	RM	LATE PMT	LP1		\$106.87	65	R			
2003	RM	SERVICE	RCS		\$25.00	1	R			

YEAR	RAT	CATEGORY	TYP	TRAN AMOUNT	TRN CNT	SCH	Rate	Sch
2003	RM	SERVICE	RCY	\$15.00	1	R		
2003	RM	SERVICE	SVS	\$25.00	1	R		
2003	RM	SERVICE	SVY	\$30.00	2	R		
2003	RNM	LATE PMT	LP1	\$75.12	52	R		
2003	RNM	SERVICE	RCS	\$25.00	1	R		
2003	RNM	SERVICE	SVY	\$195.00	13	R		
2003	VAR	FIELD COLL	FCC	\$30.00	2	VAR		
2003	VAR	LATE PMT	LP1	\$113,290.79	869	VAR		
2003	VAR	RTN CHECK	RTC	\$22.50	3	VAR		
2003	VAR	SERVICE	SVY	\$690.00	56	VAR		
2003	XXX	LATE PMT	LP1	\$9,938.53	206	VAR		
2003	XXX	RTN CHECK	RTC	\$7.50	1	VAR		
2003	XXX	SERVICE	SVS	\$50.00	2	VAR		
2003	XXX	SERVICE	SVY	\$10.00	1	VAR		
2004	E	FIELD COLL	FCC	\$90.00	6	E		
2004	E	LATE PMT	LP1	\$766.29	505	E		
2004	E	SERVICE	RCS	\$150.00	6	E		
2004	E	RTN CHECK	RTC	\$37.50	5	E		
2004	E	SERVICE	SVS	\$125.00	5	E		
2004	E	SERVICE	SVY	\$1,380.00	94	E		
2004	E1	FIELD COLL	FCC	\$30.00	2	E		
2004	E1	LATE PMT	LP1	\$434.44	298	E		
2004	E1	SERVICE	RCS	\$25.00	1	E		
2004	E1	RTN CHECK	RTC	\$22.50	3	E		
2004	E1	SERVICE	SVS	\$25.00	1	E		
2004	E1	SERVICE	SVY	\$210.00	14	E		
2004	F	LATE PMT	LP1	\$681.78	57	F		
2004	F2	LATE PMT	LP1	\$2,007.92	333	F		
2004	F6	LATE PMT	LP1	\$1,476.71	110	F		
2004	G	FIELD COLL	FCC	\$9,600.00	647	G		
2004	G	LATE PMT	LP1	\$72,205.25	32364	G		
2004	G	SERVICE	RCS	\$4,275.00	181	G		
2004	G	SERVICE	RCY	\$180.00	18	G		
2004	G	RTN CHECK	RTC	\$1,485.00	206	G		
2004	G	SERVICE	SVS	\$3,830.00	171	G		
2004	G	SERVICE	SVY	\$25,760.00	1788	G		
2004	GA	LATE PMT	LP1	\$64.01	28	G		
2004	GA4	LATE PMT	LP1	\$8.37	12	G		
2004	GD	FIELD COLL	FCC	\$1,410.00	96	G		
2004	GD	LATE PMT	LP1	\$24,938.94	3198	G		
2004	GD	SERVICE	RCS	\$350.00	14	G		
2004	GD	SERVICE	RCY	\$15.00	1	G		
2004	GD	RTN CHECK	RTC	\$322.50	43	G		
2004	GD	SERVICE	SVS	\$335.00	14	G		
2004	GD	SERVICE	SVY	\$3,090.00	206	G		
2004	GDD	LATE PMT	LP1	\$8.95	1	G		
2004	GNM	LATE PMT	LP1	\$6.75	3	G		
2004	G1	LATE PMT	LP1	\$50.47	29	G		
2004	G4	LATE PMT	LP1	\$1,094.39	777	G		
2004	G4	SERVICE	SVY	\$15.00	1	G		
2004	H	FIELD COLL	FCC	\$285.00	19	H		
2004	H	LATE PMT	LP1	\$6,168.86	1053	H		
2004	H	SERVICE	RCS	\$100.00	4	H		
2004	H	RTN CHECK	RTC	\$45.00	6	H		
2004	H	SERVICE	SVS	\$100.00	4	H		
2004	H	SERVICE	SVY	\$615.00	45	H		
2004	J	FIELD COLL	FCC	\$1,837.50	128	J		
2004	J	LATE PMT	LP1	\$97,723.88	5837	J		
2004	J	SERVICE	RCS	\$200.00	8	J		
2004	J	SERVICE	RCY	\$45.00	3	J		
2004	J	RTN CHECK	RTC	\$532.50	75	J		
2004	J	SERVICE	SVS	\$150.00	10	J		
2004	J	SERVICE	SVY	\$3,540.00	242	J		
2004	JK2	LATE PMT	LP1	\$5.34	1	J		
2004	JNM	LATE PMT	LP1	\$92.54	3	J		
2004	J2	LATE PMT	LP1	\$0.96	1	J-DS		
2004	J3	LATE PMT	LP1	\$3,564.37	30	J-DP		
2004	J4	LATE PMT	LP1	\$146.06	2	J-DS		
2004	J5	LATE PMT	LP1	\$29.76	3	J-NTWK		
2004	PP3	LATE PMT	LP1	\$2,097.87	7	PP		

YEAR	RAT	CATEGORY	TYP	TRAN AMOUNT	TRN CNT	SCH	Rate	Sch
2004	PS	LATE PMT	LP1	\$2,083.52	6	PS		
2004	R	FIELD COLL	FCC	\$46,845.00	3182	R		
2004	R	LATE PMT	LP1	\$574,729.38	414859	R		
2004	R	SERVICE	RCS	\$82,471.53	3399	R		
2004	R	SERVICE	RCY	\$5,100.00	348	R		
2004	R	RTN CHECK	RTC	\$35,550.00	4993	R		
2004	R	SERVICE	SVS	\$59,773.06	2857	R		
2004	R	SERVICE	SVY	\$556,215.00	37530	R		
2004	RDM	LATE PMT	LP1	\$64.80	13	R		
2004	RDM	SERVICE	SVY	\$15.00	1	R		
2004	RM	FIELD COLL	FCC	\$30.00	2	R		
2004	RM	LATE PMT	LP1	\$60.36	45	R		
2004	RM	SERVICE	SVY	\$30.00	2	R		
2004	RNM	LATE PMT	LP1	\$151.82	88	R		
2004	RNM	SERVICE	SVY	\$90.00	6	R		
2004	VAR	FIELD COLL	FCC	\$60.00	4	VAR		
2004	VAR	LATE PMT	LP1	\$124,231.93	869	VAR		
2004	VAR	RTN CHECK	RTC	\$45.00	6	VAR		
2004	VAR	SERVICE	SVS	\$25.00	1	VAR		
2004	VAR	SERVICE	SVY	\$705.00	47	VAR		
2004	XXX	LATE PMT	LP1	\$22,005.05	192	VAR		
2004	XXX	RTN CHECK	RTC	\$45.00	6	VAR		
2004	XXX	SERVICE	SVY	\$15.00	1	VAR		
2005	E	FIELD COLL	FCC	\$90.00	6	E		
2005	E	LATE PMT	LP1	\$635.97	389	E		
2005	E	SERVICE	RCS	\$50.00	2	E		
2005	E	RTN CHECK	RTC	\$52.50	7	E		
2005	E	SERVICE	SVS	\$25.00	1	E		
2005	E	SERVICE	SVY	\$1,200.00	82	E		
2005	E1	FIELD COLL	FCC	\$45.00	3	E		
2005	E1	LATE PMT	LP1	\$564.36	337	E		
2005	E1	SERVICE	RCS	\$25.00	1	E		
2005	E1	RTN CHECK	RTC	\$60.00	8	E		
2005	E1	SERVICE	SVS	\$25.00	1	E		
2005	E1	SERVICE	SVY	\$270.00	18	E		
2005	F	LATE PMT	LP1	\$2,304.91	94	F		
2005	F	SERVICE	SVY	\$15.00	1	F		
2005	F2	LATE PMT	LP1	\$4,041.30	225	F		
2005	F6	LATE PMT	LP1	\$4,428.52	201	F		
2005	G	FIELD COLL	FCC	\$10,575.00	717	G		
2005	G	LATE PMT	LP1	\$74,586.70	30644	G		
2005	G	SERVICE	RCS	\$3,790.00	158	G		
2005	G	SERVICE	RCY	\$150.00	10	G		
2005	G	RTN CHECK	RTC	\$1,905.00	268	G		
2005	G	SERVICE	SVS	\$3,505.66	160	G		
2005	G	SERVICE	SVY	\$27,634.55	1881	G		
2005	GA	LATE PMT	LP1	\$138.51	12	G		
2005	GA4	LATE PMT	LP1	\$14.12	15	G		
2005	GD	FIELD COLL	FCC	\$1,680.00	114	G		
2005	GD	LATE PMT	LP1	\$23,109.80	3119	G		
2005	GD	SERVICE	RCS	\$400.00	18	G		
2005	GD	SERVICE	RCY	\$30.00	2	G		
2005	GD	RTN CHECK	RTC	\$420.00	56	G		
2005	GD	SERVICE	SVS	\$295.00	13	G		
2005	GD	SERVICE	SVY	\$3,205.00	224	G		
2005	GDD	LATE PMT	LP1	\$9.39	1	G		
2005	G1	LATE PMT	LP1	\$175.18	70	G		
2005	G4	LATE PMT	LP1	\$2,377.90	1102	G		
2005	H	FIELD COLL	FCC	\$345.00	23	H		
2005	H	LATE PMT	LP1	\$6,151.08	983	H		
2005	H	SERVICE	RCS	\$100.00	4	H		
2005	H	SERVICE	RCY	\$15.00	1	H		
2005	H	RTN CHECK	RTC	\$75.00	10	H		
2005	H	SERVICE	SVS	\$85.00	4	H		
2005	H	SERVICE	SVY	\$555.00	39	H		
2005	J	FIELD COLL	FCC	\$1,395.00	98	J		
2005	J	LATE PMT	LP1	\$110,337.90	5627	J		
2005	J	SERVICE	RCS	\$325.00	13	J		
2005	J	SERVICE	RCY	\$15.00	1	J		
2005	J	RTN CHECK	RTC	\$585.00	80	J		

YEAR	RAT	CATEGORY	TYP	TRAN AMOUNT	TRN CNT	SCH	Rate	Sch
2005	J	SERVICE	SVS	\$260.00	11	J		
2005	J	SERVICE	SVY	\$4,105.00	277	J		
2005	JNM	LATE PMT	LP1	\$92.04	3	J		
2005	J3	LATE PMT	LP1	\$5,621.08	31	J-DP		
2005	J4	LATE PMT	LP1	\$535.36	6	J-DS		
2005	J5	LATE PMT	LP1	\$98.95	8	J-NTWK		
2005	PP3	LATE PMT	LP1	\$866.97	2	PP		
2005	PS	LATE PMT	LP1	\$1,021.67	10	PS		
2005	R	FIELD COLL	FCC	\$56,595.00	3870	R		
2005	R	LATE PMT	LP1	\$636,411.91	415088	R		
2005	R	SERVICE	RCS	\$98,665.00	4217	R		
2005	R	SERVICE	RCY	\$6,080.00	412	R		
2005	R	RTN CHECK	RTC	\$36,211.00	5112	R		
2005	R	SERVICE	SVS	\$61,023.26	2827	R		
2005	R	SERVICE	SVY	\$573,238.78	38647	R		
2005	RDM	LATE PMT	LP1	\$48.41	18	R		
2005	RM	LATE PMT	LP1	\$29.33	27	R		
2005	RNM	LATE PMT	LP1	\$133.74	74	R		
2005	RNM	SERVICE	RCS	\$75.00	3	R		
2005	RNM	SERVICE	SVY	\$120.00	8	R		
2005	U3X	LATE PMT	LP1	\$117.85	1	J		
2005	VAR	FIELD COLL	FCC	\$15.00	1	VAR		
2005	VAR	LATE PMT	LP1	\$116,963.30	753	VAR		
2005	VAR	RTN CHECK	RTC	\$22.50	3	VAR		
2005	VAR	SERVICE	SVS	\$25.00	1	VAR		
2005	VAR	SERVICE	SVY	\$735.00	53	VAR		
2005	XXX	FIELD COLL	FCC	\$14.86	1	VAR		
2005	XXX	LATE PMT	LP1	\$9,656.31	142	VAR		
2005	XXX	RTN CHECK	RTC	\$7.50	5	VAR		
2005	XXX	SERVICE	SVS	\$25.00	1	VAR		
2005	XXX	SERVICE	SVY	\$15.00	1	VAR		
2006	E	FIELD COLL	FCC	\$15.00	1	E		
2006	E	LATE PMT	LP1	\$557.18	320	E		
2006	E	SERVICE	RCS	\$50.00	2	E		
2006	E	RTN CHECK	RTC	\$7.50	3	E		
2006	E	SERVICE	SVS	\$50.00	2	E		
2006	E	SERVICE	SVY	\$975.00	65	E		
2006	E1	FIELD COLL	FCC	\$30.00	2	E		
2006	E1	LATE PMT	LP1	\$621.01	330	E		
2006	E1	SERVICE	RCS	\$40.00	3	E		
2006	E1	SERVICE	RCY	\$15.00	1	E		
2006	E1	RTN CHECK	RTC	\$30.00	4	E		
2006	E1	SERVICE	SVS	\$25.00	1	E		
2006	E1	SERVICE	SVY	\$180.00	12	E		
2006	F	LATE PMT	LP1	\$1,133.75	36	F		
2006	F2	LATE PMT	LP1	\$4,569.30	325	F		
2006	F6	LATE PMT	LP1	\$1,973.62	66	F		
2006	G	FIELD COLL	FCC	\$11,512.50	779	G		
2006	G	LATE PMT	LP1	\$81,190.60	29860	G		
2006	G	SERVICE	RCS	\$4,695.00	198	G		
2006	G	SERVICE	RCY	\$165.00	11	G		
2006	G	RTN CHECK	RTC	\$1,627.50	225	G		
2006	G	SERVICE	SVS	\$3,350.00	147	G		
2006	G	SERVICE	SVY	\$24,919.64	1711	G		
2006	GA	LATE PMT	LP1	\$267.79	103	G		
2006	GA4	LATE PMT	LP1	\$17.09	15	G		
2006	GD	FIELD COLL	FCC	\$1,185.00	79	G		
2006	GD	LATE PMT	LP1	\$20,809.78	2863	G		
2006	GD	SERVICE	RCS	\$800.00	32	G		
2006	GD	SERVICE	RCY	\$45.00	3	G		
2006	GD	RTN CHECK	RTC	\$217.50	29	G		
2006	GD	SERVICE	SVS	\$200.00	12	G		
2006	GD	SERVICE	SVY	\$3,045.00	217	G		
2006	GNM	LATE PMT	LP1	\$13.06	2	G		
2006	G1	LATE PMT	LP1	\$64.73	21	G		
2006	G4	LATE PMT	LP1	\$1,130.04	484	G		
2006	H	FIELD COLL	FCC	\$382.50	26	H		
2006	H	LATE PMT	LP1	\$7,688.39	1094	H		
2006	H	SERVICE	RCS	\$100.00	4	H		
2006	H	RTN CHECK	RTC	\$120.00	16	H		

YEAR	RAT	CATEGORY	TYP	TRAN AMOUNT	TRN CNT	SCH	Rate	Sch
2006	H	SERVICE	SVS	\$50.00	2	H		
2006	H	SERVICE	SVY	\$640.00	43	H		
2006	J	FIELD COLL	FCC	\$1,530.00	102	J		
2006	J	LATE PMT	LP1	\$125,250.91	5426	J		
2006	J	SERVICE	RCS	\$300.00	12	J		
2006	J	SERVICE	RCY	\$15.00	1	J		
2006	J	RTN CHECK	RTC	\$787.50	105	J		
2006	J	SERVICE	SVS	\$125.00	7	J		
2006	J	SERVICE	SVY	\$3,810.00	268	J		
2006	JNM	LATE PMT	LP1	\$431.06	6	J		
2006	JNM	SERVICE	SVY	\$15.00	1	J		
2006	J3	LATE PMT	LP1	\$1,734.35	24	J-DP		
2006	J3	SERVICE	SVY	\$30.00	2	J-DP		
2006	J4	LATE PMT	LP1	\$370.61	6	J-DS		
2006	J5	LATE PMT	LP1	\$29.99	1	J-NTWK		
2006	J5	RTN CHECK	RTC	\$7.50	1	J-NTWK		
2006	J5	SERVICE	SVY	\$15.00	1	J-NTWK		
2006	PS	LATE PMT	LP1	\$1,695.20	3	PS		
2006	R	FIELD COLL	FCC	\$69,405.00	4755	R		
2006	R	LATE PMT	LP1	\$739,586.81	427415	R		
2006	R	SERVICE	RCS	\$130,550.00	5653	R		
2006	R	SERVICE	RCY	\$6,550.00	448	R		
2006	R	RTN CHECK	RTC	\$41,392.50	5843	R		
2006	R	SERVICE	SVS	\$72,233.68	3330	R		
2006	R	SERVICE	SVY	\$536,163.90	36146	R		
2006	RDM	LATE PMT	LP1	\$60.11	16	R		
2006	RDM	SERVICE	SVY	\$75.00	5	R		
2006	RM	LATE PMT	LP1	\$23.51	19	R		
2006	RM	SERVICE	SVY	\$15.00	1	R		
2006	RNM	LATE PMT	LP1	\$148.89	72	R		
2006	RNM	SERVICE	RCS	\$25.00	1	R		
2006	RNM	SERVICE	SVY	\$105.00	7	R		
2006	VAR	LATE PMT	LP1	\$157,020.62	709	VAR		
2006	VAR	RTN CHECK	RTC	\$15.00	2	VAR		
2006	VAR	SERVICE	SVY	\$780.00	52	VAR		
2006	XXX	LATE PMT	LP1	\$19,911.91	149	VAR		
2006	XXX	RTN CHECK	RTC	\$37.50	4	VAR		
2007	E	FIELD COLL	FCC	\$15.00	1	E		
2007	E	LATE PMT	LP1	\$314.53	206	E		
2007	E	SERVICE	RCS	\$25.00	1	E		
2007	E	RTN CHECK	RTC	\$15.00	2	E		
2007	E	SERVICE	SVY	\$1,275.00	87	E		
2007	E1	FIELD COLL	FCC	\$30.00	2	E		
2007	E1	LATE PMT	LP1	\$679.75	358	E		
2007	E1	RTN CHECK	RTC	\$15.00	2	E		
2007	E1	SERVICE	SVY	\$75.00	5	E		
2007	F	LATE PMT	LP1	\$1,158.67	59	F		
2007	F2	LATE PMT	LP1	\$3,794.76	274	F		
2007	F6	LATE PMT	LP1	\$2,165.47	110	F		
2007	G	FIELD COLL	FCC	\$9,720.00	673	G		
2007	G	LATE PMT	LP1	\$78,909.15	30557	G		
2007	G	SERVICE	RCS	\$4,645.00	194	G		
2007	G	SERVICE	RCY	\$105.00	9	G		
2007	G	RTN CHECK	RTC	\$2,107.50	297	G		
2007	G	SERVICE	SVS	\$4,387.50	188	G		
2007	G	SERVICE	SVY	\$23,664.05	1627	G		
2007	GA	LATE PMT	LP1	\$374.77	94	G		
2007	GA4	LATE PMT	LP1	\$0.92	1	G		
2007	GD	FIELD COLL	FCC	\$877.50	63	G		
2007	GD	LATE PMT	LP1	\$18,226.37	2842	G		
2007	GD	SERVICE	RCS	\$465.00	20	G		
2007	GD	RTN CHECK	RTC	\$255.00	34	G		
2007	GD	SERVICE	SVS	\$335.00	14	G		
2007	GD	SERVICE	SVY	\$3,000.00	200	G		
2007	GNM	LATE PMT	LP1	\$25.56	5	G		
2007	G1	LATE PMT	LP1	\$59.46	36	G		
2007	G17	LATE PMT	LP1	\$14.70	2	G		
2007	G4	LATE PMT	LP1	\$1,027.31	737	G		
2007	G4	SERVICE	SVY	\$15.00	1	G		
2007	H	FIELD COLL	FCC	\$135.00	9	H		

YEAR	RAT	CATEGORY	TYP	TRAN AMOUNT	TRN CNT	SCH	<u>Rate</u>	<u>Sch</u>
2007	H	LATE PMT	LP1	\$7,235.17	1030	H		
2007	H	SERVICE	RCS	\$115.00	6	H		
2007	H	RTN CHECK	RTC	\$120.00	16	H		
2007	H	SERVICE	SVY	\$475.00	36	H		
2007	J	FIELD COLL	FCC	\$1,470.00	101	J		
2007	J	LATE PMT	LP1	\$117,769.64	5451	J		
2007	J	SERVICE	RCS	\$425.00	17	J		
2007	J	SERVICE	RCY	\$15.00	1	J		
2007	J	RTN CHECK	RTC	\$645.00	98	J		
2007	J	SERVICE	SVS	\$200.00	8	J		
2007	J	SERVICE	SVY	\$3,375.00	227	J		
2007	JNM	LATE PMT	LP1	\$177.22	4	J		
2007	J3	LATE PMT	LP1	\$3,466.43	38	J-DP		
2007	J3	SERVICE	SVY	\$15.00	1	J-DP		
2007	J4	LATE PMT	LP1	\$621.66	10	J-DS		
2007	J5	LATE PMT	LP1	\$39.97	4	J-NTWK		
2007	PP3	LATE PMT	LP1	\$808.92	8	PP		
2007	PP6	LATE PMT	LP1	\$15,976.10	2	PP		
2007	PS	LATE PMT	LP1	\$2,554.59	5	PS		
2007	R	FIELD COLL	FCC	\$71,292.50	4873	R		
2007	R	LATE PMT	LP1	\$723,512.74	423962	R		
2007	R	SERVICE	RCS	\$144,470.00	6441	R		
2007	R	SERVICE	RCY	\$9,455.00	648	R		
2007	R	RTN CHECK	RTC	\$47,632.50	7034	R		
2007	R	SERVICE	SVS	\$74,145.04	3397	R		
2007	R	SERVICE	SVY	\$526,554.46	35596	R		
2007	RDM	LATE PMT	LP1	\$73.56	16	R		
2007	RNM	LATE PMT	LP1	\$103.19	74	R		
2007	RNM	RTN CHECK	RTC	\$7.50	1	R		
2007	RNM	SERVICE	SVY	\$120.00	8	R		
2007	VAR	FIELD COLL	FCC	\$30.00	2	VAR		
2007	VAR	LATE PMT	LP1	\$206,780.35	753	VAR		
2007	VAR	RTN CHECK	RTC	\$15.00	8	VAR		
2007	VAR	SERVICE	SVS	\$25.00	1	VAR		
2007	VAR	SERVICE	SVY	\$885.00	61	VAR		
2007	XXX	FIELD COLL	FCC	\$15.00	1	VAR		
2007	XXX	LATE PMT	LP1	\$13,451.63	161	VAR		
2007	XXX	RTN CHECK	RTC	\$7.50	3	VAR		

	Labor	Nonlabor		
Substation	1,663,555	1,951,756	10000	
Lines	4,428,588	6,434,258	2000	
Transformer	503,685	549,107		
Services	120,056	259,740	-68000	
Meters	814,003	284,986		
Street Lighting	15,271	-		
Misc Distribution	<u>3,138,441</u>	<u>4,558,597</u>	10000	
	<u><u>10,683,598</u></u>	<u><u>14,038,443</u></u>	24,722,041	24,722,000

Note, included Load Dispatching, Oper Supv & Eng and Rents into Misc. Distribution.

acct blk	B34
acct blk desc	Distribution Operation

	Data		
naruc desc	2005 Labor	2006 Labor	2007 Labor
CUSTOMER INSTALLATION EXPENSES	157,775	151,229	188,056
LOAD DISPATCHING - DIST OPER	776,689	704,483	928,836
METER EXPENSES - DIST OPER	785,618	722,125	814,003
MISC DISTRIBUTION OPER EXPENSES	1,770,901	1,444,916	1,455,840
OPER SUPV & ENG - DIST OPER	162,326	222,611	264,005
OVERHEAD LINE EXP - DIST OPER	459,588	581,723	554,723
RENTS - DIST OPER	-	-	-
STATION EXPENSES - DIST OPER	340,270	331,779	308,590
UNDERGRND LINE EXP - DIST OPER	540,995	809,920	810,615
Grand Total	4,994,163	4,968,787	5,324,667

acct blk	B34
acct blk desc	Distribution Operation

	Data		
naruc desc	2005 NL	2006 NL	2007 NL
CUSTOMER INSTALLATION EXPENSES	(71,585)	70,865	259,740
LOAD DISPATCHING - DIST OPER	834,273	654,617	834,088
METER EXPENSES - DIST OPER	140,904	172,607	284,986
MISC DISTRIBUTION OPER EXPENSES	2,274,098	2,738,028	2,515,125
OPER SUPV & ENG - DIST OPER	85,508	136,291	166,104
OVERHEAD LINE EXP - DIST OPER	518,173	336,797	343,061
RENTS - DIST OPER	7,524	8,496	8,824
STATION EXPENSES - DIST OPER	233,709	254,357	509,506
UNDERGRND LINE EXP - DIST OPER	532,746	472,025	472,946
Grand Total	4,555,351	4,844,083	5,394,380

acct blk	B35
acct blk desc	Distribution Maintenance

	Data		
naruc desc	2005 Labor	2006 Labor	2007 Labor
MAINT OF LINE TRANSFORMER-DIST	503,529	526,439	503,685
MAINT OF METERS - DIST	9,413	-	-
MAINT OF MISC DIST PLT	345,351	522,117	489,760
MAINT OF OVERHEAD LINES-DIST	1,892,808	1,747,083	1,728,467
MAINT OF STREET LIGHTING & SIGNAL	42,261	23,377	15,271
MAINT OF STRUCT - DIST	43,927	193,187	204,758
MAINT OF SUBSTN EQUIP - DIST	911,051	1,111,732	1,150,206
MAINT OF UNDERGRND LINES-DIST	1,898,152	1,384,825	1,334,784
MAINT SUPV & ENG - DIST	-	-	-
Grand Total	5,646,493	5,508,760	5,426,930

acct blk	B35
acct blk desc	Distribution Maintenance

	Data		
naruc desc	2005 NL	2006 NL	2007 NL
MAINT OF LINE TRANSFORMER-DIST	484,040	543,987	549,107
MAINT OF METERS - DIST	300	-	-
MAINT OF MISC DIST PLT	820,500	962,482	1,024,456
MAINT OF OVERHEAD LINES-DIST	3,054,824	4,161,127	4,620,610
MAINT OF STREET LIGHTING & SIGNAL	20,754	0	(0)
MAINT OF STRUCT - DIST	93,875	142,107	158,523
MAINT OF SUBSTN EQUIP - DIST	1,040,497	1,101,100	1,273,726
MAINT OF UNDERGRND LINES-DIST	2,330,833	861,762	995,640
MAINT SUPV & ENG - DIST	-	-	-
Grand Total	7,845,623	7,772,564	8,622,063

HAWAIIAN ELECTRIC COMPANY, INC.
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EXPENSE ITEMS

Line No.	Plant Acct. No.	FUNCTION	2008		2009	
			Depreciation Expense (\$000s)	Amortized ITC (\$000s)	Depreciation Expense (\$000s)	Amortized ITC (\$000s)
L1	311-316, 341-346	Production	10,014	614	10,269	606
L2	352-359	Transmission	16,926	329	17,374	326
		Distribution				
L3	361-362	Substation	4,836	136	7,198	139
L4	364	Poles	3,464	78	4,635	80
L5	365-367	Lines	23,290	348	23,448	343
L6	368	Transformers	8,287	146	6,070	148
L7	369	Services	8,590	207	8,417	213
L8	370	Meters	849	30	1,231	29
L9	373	Street lights	0	0	0	
L10 = $\Sigma(L3:L9)$		Subtotal	49,316	945	50,999	952
	392	Vehicles	1,978	24	2,140	25
L11	390-391, 393-398	General Plant	13,429	191	12,307	197
L12		CHP	0	0	0	0
L13 = $\Sigma(L1:L2, L10:L12)$		Total	91,663	2,103	93,089	2,106

Transmission plant and distribution substation depreciation include amortization of rights of way accounts 350.1 and 360.1

HAWAIIAN ELECTRIC COMPANY, INC.
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Contribution-in-Aid-of-Construction (CIAC)

Line No.	Plant Acct No.	FUNCTION	2008				2009				
			Beginning Balance (\$000s)	Receipts (\$000s)	Transfer Fr Acct 272 (\$000s)	Amortized Amount (\$000s)	Ending Balance (\$000s)	Receipts (\$000s)	Transfer Fr Acct 272 (\$000s)	Amortized Amount (\$000s)	Ending Balance (\$000s)
L1	311-316,341-346	Production									
L2	352-359	Transmission	60,373	3,460	7	3,084	60,756	3,749	23	3,182	61,346
		Distribution									
L3	361-362	Substation	15,420	884	2	787	15,519	958	6	812	15,671
L4	364	Poles	10,638	610	1	543	10,706	661	4	560	10,811
L5	365-367	Lines	55,309	3,169	6	2,824	55,660	3,435	21	2,914	56,202
L6	368	Transformers	13,408	768	1	685	13,492	833	5	706	13,624
L7	369	Services	18,454	1,058	2	942	18,572	1,146	7	972	18,753
L8	370	Meters	2,823	162		144	2,841	175	1	149	2,868
L9	373	Street lights									
L10 = Σ(L3:L9)			Subtotal								
L11	390-398	General Plant									
L12		CHP									
L13 = Σ(L1:L2, L10:L12)											
		Total	176,425	10,111	19	9,009	177,546	10,957	67	9,295	179,275

Allocation to the various functions based upon 5 year average plant balance for those functions that would be applicable.

HAWAIIAN ELECTRIC COMPANY, INC.
REQUIRED DATA FOR COST-OF-SERVICE STUDY
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Customer Advances

Line No.	Plant Acct No.	FUNCTION	2008				2009					
			Beginning Balance (\$000s)	Receipts (\$000s)	Transfer To Acct 271 (\$000s)	Refund (\$000s)	Ending Balance (\$000s)	Receipts (\$000s)	Transfer To Acct 271 (\$000s)	Refund (\$000s)	Ending Balance (\$000s)	
L1	311-316,341-346	Production										
L2	352-359	Transmission										
L3	361-362	Distribution										
L4	364	Substation										
L5	365-367	Poles	877	100	18	113	846	105	64	118	769	
L6	368	Lines										
L7	369	Transformers										
L8	370	Services	44	5	1	6	42	5	3	6	38	
L9	373	Meters										
L10 = Σ(L3:L9)		Street lights										
		Subtotal										
L11	390-398	General Plant										
L12		CHP										
		Total	921	105	19	119	888	110	67	124	807	
L13 = Σ(L1:L2, L10:L12)												

Allocation to the various functions based upon 5 year average plant balance for those functions that would be applicable.

Plant Balance @ 12/31 per KPMG Schedules

			2007	2006	2005	2004	2003	5 Yr Avg	Allocation %
	Transmission	*	571,688,979	567,054,799	541,241,857	530,002,880	516,937,448	545,385,193	34.22
361			23,029,617	23,928,860	21,679,724	20,008,533	17,846,129	21,298,573	
362			135,734,071	126,028,584	114,934,940	110,341,198	102,629,915	117,933,742	
361-362	Substation	*	158,763,688	149,957,444	136,614,664	130,349,731	120,476,044	139,232,314	8.74
364	Poles	*	105,278,280	99,508,070	95,064,849	91,693,348	89,223,167	96,153,543	6.03
365			87,663,964	87,701,277	86,313,650	85,135,811	79,464,676	85,255,876	
366			206,620,530	200,555,586	196,384,452	190,590,064	189,070,485	196,644,223	
367			238,735,650	227,386,941	220,260,694	204,306,717	197,459,774	217,629,955	
365-367	Lines	*	533,020,144	515,643,804	502,958,796	480,032,592	465,994,935	499,530,054	31.35
368	Transformers	*	136,976,787	126,885,213	119,267,962	113,444,606	109,144,065	121,143,727	7.60
369	Services		185,011,716	178,410,786	173,041,607	157,942,007	138,637,997	166,608,823	10.46
370	Meters		27,829,737	26,546,606	24,861,147	24,293,434	23,845,351	25,475,255	1.60
Total			1,718,569,331	1,664,006,722	1,593,050,882	1,527,758,598	1,464,259,007	1,593,528,908	100.00

Transmission excludes account 3501 Land Rights of Way

Allocation of CIAC for 2008

	Allocation %	Beg Bal	Receipts	Transfer	Amortized
Total	100.00	176,425	10,110	19	9,009
Transmission	34.22	60,373	3,460	7	3,083
Substation	8.74	15,420	884	2	787
Poles	6.03	10,638	610	1	543
Lines	31.35	55,309	3,169	6	2,824
Transformers	7.60	13,408	768	1	685
Services	10.46	18,454	1,058	2	942
Meters	1.60	2,823	162	0	144

Allocation of CIAC for 2009

	Allocation %	Receipts	Transfer	Amortized
Total	100.00	10,957	67	9,295
Transmission	34.22	3,749	23	3,181
Substation	8.74	958	6	812
Poles	6.03	661	4	560
Lines	31.35	3,435	21	2,914
Transformers	7.60	833	5	706
Services	10.46	1,146	7	972
Meters	1.60	175	1	149

Plant Balance @ 12/31 per KPMG Schedules

		2007	2006	2005	2004	2003	5 Yr Avg	Allocation %
365		87,663,964	87,701,277	86,313,650	85,135,811	79,464,676	85,255,876	
366		206,620,530	200,555,586	196,384,452	190,590,064	189,070,485	196,644,223	
367		238,735,650	227,386,941	220,260,694	204,306,716	197,459,774	217,629,955	
365-367	Lines	533,020,144	515,643,804	502,958,796	480,032,591	465,994,935	499,530,054	95.18
370	Meters	27,829,737	26,546,606	24,861,147	24,293,434	23,073,810	25,320,947	4.82
Total Lines & Meters		560,849,881	542,190,410	527,819,943	504,326,025	489,068,745	524,851,001	100.00

Allocation of Customer Advances for Test Year 2008

	Allocation %	Beg Bal	Receipts	Transfer	Refund
Total	100.00	921	105	19	119
Lines	95.18	877	100	18	113
Meters	4.82	44	5	1	6

Allocation of Customer Advances for Test Year 2009

	Allocation %	Receipts	Transfer	Refund
Total	100.00	110	67	124
Lines	95.18	105	64	118
Meters	4.82	5	3	6

Methodology consistent with 2005 Rate Case

HAWAIIAN ELECTRIC COMPANY, INC.
REQUIRED DATA FOR COST-OF-SERVICE STUDY
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GROSS PLANT-IN-SERVICE BALANCE ESTIMATE

Line No.	Plant Acct. No.	FUNCTION	2008				2009			
			Beginning Plant Balance (\$000s)	Plant Additions (\$000s)	Plant Retirement (\$000s)	Ending Plant Balance (\$000s)	Plant Additions (\$000s)	Plant Retirement (\$000s)	Ending Plant Balance (\$000s)	
<u>Production</u>										
L1	310, 340	Land	11,058	7,447		18,505			18,505	
L2	311-316, 341-346	Production Plant	567,172	30,020	3,488	593,704	174,979	3,718	764,965	
L3 = Σ(L1:L2)		Total Production	578,230	37,467	3,488	612,209	174,979	3,718	783,470	
<u>Transmission</u>										
L4	350	Land	16,609	290		16,899	191		17,090	
L5	352-359	Transmission Plant	571,689	16,704	1,308	587,085	17,598	1,343	603,340	
L6 = Σ(L4:L5)		Total Transmission	588,298	16,994	1,308	603,984	17,789	1,343	620,430	
<u>Distribution</u>										
L7	360	Land	7,786	100		7,886	2,239		10,125	
L8	361-362	Substation	158,764	8,869	515	167,118	10,878	532	177,464	
L9	364	Poles	105,278	3,169	624	107,823	3,887	645	111,065	
L10	365-367	Lines	533,020	13,180	741	545,459	16,161	767	560,853	
L11	368	Transformers	136,991	6,525	2,310	141,206	8,003	2,389	146,820	
L12	369	Services	185,012	10,855	65	195,802	13,312	67	209,047	
L13	370	Meters	27,830	1,237	439	28,628	1,517	454	29,691	
L14	373	Street light				0			0	
L15 = Σ(L7:L14)		Total Distribution	1,154,681	43,935	4,694	1,193,922	55,997	4,854	1,245,065	
<u>General Plant</u>										
L16	389	Land	207			207			207	
L17	390-398	General Plant	208,213	11,824	7,711	212,326	15,914	6,112	222,128	
L18 = Σ(L16:L17)		Total General Plant	208,420	11,824	7,711	212,533	15,914	6,112	222,335	
L19		<u>CHP Plant</u>				0			0	
L20 = L3+L6+L15+L18+L19		Total Plant	2,529,629	110,220	17,201	2,622,648	264,679	16,027	2,871,300	

Distribution Additions and Retires for 2003 - 2007

2006	Additions	Retires	% of Total	
			Additions	Retires
361	2,249,136		5	0
362	11,093,644		23	0
364	5,019,945	(576,725)	10	15
365	1,821,349	(433,722)	4	11
366	4,171,134		8	0
367	7,526,198	(399,951)	15	10
368	9,546,950	(1,929,699)	19	49
369	5,455,773	(86,594)	11	2
370	2,210,733	(525,274)	5	13
	49,094,862	(3,951,965)	100	100

2005	Additions	Retires	% of Total	
			Additions	Retires
361	1,671,191		3	0
362	4,870,199	(276,456)	8	7
364	3,955,959	(584,458)	7	14
365	1,683,776	(505,936)	3	12
366	5,794,692	(303)	10	0
367	16,232,352	(278,375)	28	7
368	7,867,312	(2,043,956)	14	49
369	15,178,230	(78,631)	26	2
370	965,374	(397,660)	2	10
	58,219,085	(4,165,775)	100	100

2004	Additions	Retires	% of Total	
			Additions	Retires
361	2,212,053	(49,649)	4	1
362	9,561,461	(1,850,177)	17	41
364	2,774,690	(304,509)	5	7
365	5,870,959	(199,824)	11	4
366	1,523,952	(4,373)	3	0
367	6,951,270	(104,326)	13	2
368	6,116,266	(1,815,724)	11	40
369	19,319,267	(15,256)	35	0
370	664,271	(216,188)	1	5
	54,994,189	(4,560,026)	100	100

Allocation of 2008 Additions and Retires Using 2003 - 2007 Avg

Additions	43,835	Retires	4,694
Additions		Retires	
361	1,632	(12)	
362	7,237	(503)	
364	3,169	(624)	
365	2,277	(438)	
366	2,797	(2)	
367	8,105	(301)	
368	6,525	(2,310)	
369	10,855	(65)	
370	1,237	(439)	
	43,835	(4,694)	

2003	Additions	Retires	% of Total	
			Additions	Retires
361	871,272		2	0
362	4,403,200		12	0
364	1,194,045	(595,058)	3	19
365	1,706,635	(279,035)	5	9
366	190,978	(4,461)	1	0
367	7,704,868	(91,616)	21	3
368	3,909,316	(2,042,198)	11	64
369	16,117,946	(6,284)	43	0
370	961,948	(190,407)	3	6
	37,060,208	(3,209,058)	100	100

Allocation of 2009 Additions and Retires Using 2003 - 2007 Avg

Additions	53,758	Retires	4,854
Additions		Retires	
361	2,002	(12)	
362	8,876	(520)	
364	3,887	(645)	
365	2,792	(453)	
366	3,430	(2)	
367	9,940	(312)	
368	8,003	(2,388)	
369	13,312	(67)	
370	1,517	(454)	
	53,758	(4,854)	

2007	Additions	Retires	% of Total	
			Additions	Retires
361	2,249,136		5	0
362	11,093,644		23	0
364	5,019,945	(576,725)	10	15
365	1,821,349	(433,722)	4	11
366	4,171,134		8	0
367	7,526,198	(399,951)	15	10
368	9,546,950	(1,929,699)	19	49
369	5,455,773	(86,594)	11	2
370	2,210,733	(525,274)	5	13
	49,094,862	(3,951,965)	100	100

Note - Plant additions include net adjustments

Total	Additions	Retires	% of Total	
			Additions	Retires
361	9,252,788	(49,649)	4	0
362	41,022,148	(2,126,633)	17	11
364	17,964,584	(2,637,475)	7	13
365	12,904,068	(1,852,239)	5	9
366	15,851,890	(9,137)	6	0
367	45,940,886	(1,274,219)	18	6
368	36,986,794	(9,761,276)	15	49
369	61,526,989	(273,359)	25	1
370	7,013,059	(1,854,803)	3	9
	248,463,206	(19,838,789)	100	100

HAWAIIAN ELECTRIC COMPANY, INC.
REQUIRED DATA FOR COST-OF-SERVICE STUDY
Docket No. 2008-0083, Test-Year 2009

Depreciation Reserve Balance Estimate

Line No.	Plant Acct. No.	FUNCTION	2008						2009					
			Beginning Balance (\$000s)	Depreciation Accrual (\$1000s)	Gross Retirement (\$000s)	Removal Cost (\$000s)	Gross Salvage (\$000s)	Ending Depreciation Balance (\$000s)	Depreciation Accrual (\$1000s)	Gross Retirement (\$000s)	Removal Cost (\$000s)	Gross Salvage (\$000s)	Ending Depreciation Balance (\$000s)	
L1	311-316, 341-346	Production	317,789	10,013	3,488	1,215	1	323,100	10,269	3,718	1,271	1	328,381	
L2	352-359	Transmission	249,561	16,926	1,308	919		264,260	17,374	1,343	943		279,348	
L3	361-362	Distribution												
L4	364	Substation	61,073	4,836	515	478	12	64,928	7,198	532	494	12	71,112	
L5	365-367	Poles	62,429	3,464	624	579	14	70,704	4,635	645	599	15	74,110	
L6	368	Lines	252,456	23,291	741	689	17	274,334	23,448	767	713	17	296,319	
L7	369	Transformers	17,043	8,287	2,310	2,143	53	20,930	6,070	2,389	2,216	55	22,450	
L8	370	Services	103,547	8,590	65	60	1	112,013	8,417	67	62	2	120,303	
L9	373	Meters	12,565	849	439	407	10	12,578	1,231	454	421	10	12,944	
		Street lights												
L10 = Σ(L3:L9)		Subtotal	515,113	49,317	4,694	4,356	107	555,487	50,999	4,854	4,505	111	597,238	
L11	390-398	General Plant	92,055	15,407	7,711	59	152	99,844	14,447	6,112	63	164	108,280	
L12		CHP						0					0	
		Total	1,174,518	91,663	17,201	6,549	260	1,242,691	93,089	16,027	6,782	276	1,313,247	

L13 = Σ(L1:L2, L10:L12)

Includes removal reg liability (COR)

Calculation of Distribution by Retirement, Removal, and Salvage by Function

	2008			2009		
	Retirement Note 1	Removal Cost to Retire (.927993)	Gross Salvage to Retire (.022795)	Retirement Note 1	Removal Cost to Retire (.927993)	Gross Salvage to Retire (.022795)
Substation	515	478	12	532	494	12
Poles	624	579	14	645	599	15
Lines	741	689	17	767	713	17
Transformers	2,310	2,144	53	2,389	2,217	54
Services	65	60	1	67	62	2
Meters	439	407	10	454	421	10
Total	4,694	4,357	107	4,854	4,505	111

Note 1 - Based on plant retirement for detailed distribution function calculated as part of the gross plant-in-service balance which used historical additions and retirements % for distribution function

Calculation of Distribution Beginning Reserve Balance

Use 5 year average reserve balance per KPMG schedules to allocate 1/1/08 beginning balance. Unable to use 2005 ending balance since KPMG reserve balance does not agree to FERC reserve balance @ 12/31/05 (\$5.5M difference)

		Reserve 2007	2006	2005	2004 *	2003 *	5 Yr Avg	%	1/1/06 Bal \$515,113
361		9,405,220	8,603,603	7,877,332	7,207,046	7,109,297	8,040,500		
362		50,407,998	47,402,708	43,969,900	40,936,052	39,771,353	44,497,602		
361-362	Substation	59,813,218	56,006,311	51,847,232	48,143,098	46,880,650	52,538,102	12	61,073
364	Poles	62,894,300	61,029,441	59,081,254	57,510,815	53,817,670	58,866,696	13	68,429
365		63,697,389	58,843,123	54,254,180	49,825,500	45,922,701	54,508,579		
366		62,463,135	58,054,083	53,733,677	49,544,082	45,368,015	53,832,598		
367		130,003,285	118,943,728	107,901,102	97,743,166	89,581,279	108,834,512		
365-367	Lines	256,163,809	235,840,934	215,888,959	197,112,748	180,871,995	217,175,689	49	252,455
368	Transformers	22,738,384	18,082,943	13,764,597	10,349,479	8,372,280	14,661,537	3	17,043
369	Services	103,371,768	95,965,438	88,855,829	82,028,535	75,162,683	89,076,851	20	103,547
370	Meters	11,310,903	11,153,770	10,938,229	10,612,514	10,030,102	10,809,104	2	12,565
Total		516,292,382	478,078,837	440,376,100	405,757,189	375,135,380	443,127,978	100	515,113

* Per 2005 Rate Case workpapers

HAWAIIAN ELECTRIC COMPANY, INC.
REQUIRED DATA FOR COST-OF-SERVICE STUDY
Docket No. 2008-0083, Test-Year 2009

Rate Base Items

Line No.	FUNCTION	Property Held For Future Use (\$000s)	Unamortized ITC (\$000s)	Regulatory Assets (\$000s)	Deferred Income Tax (\$000s)
L1	Production		8,269.7	15,411.3	33,857.2
L2	Transmission		7,225.8	13,504.9	29,800.7
	Distribution				
L3	Substation		2,092.4	3,909.1	8,620.4
L4	Poles		1,328.7	2,483.2	5,479.3
L5	Lines		6,715.2	12,550.7	27,694.7
L6	Transformers		1,748.5	3,267.5	7,208.7
L7	Services		2,458.5	4,592.8	10,127.0
L8	Meters		354.1	661.6	1,459.7
L9	Street lights		-	-	-
L10 = $\Sigma(L3:L9)$	Subtotal		14,697.4	27,464.9	60,589.8
L11	General Plant		2,637.7	4,928.7	10,872.1
L12	CHP		-	-	-
L13 = $\Sigma(L1:L2, L10:L12)$	Total		32,830.6	61,309.8	135,119.8

HAWAIIAN ELECTRIC COMPANY, INC.
TEST YEAR 2009 (\$1000S)

	<u>BUDGET</u>	<u>BUD ADJ</u>	<u>NORM</u>	<u>DIRECT</u>
D. Giovanni				
PRODUCTION O & M EXPENSE				
PRODUCTION OPER				
LABOR	15,373	29		15,402
NON-LABOR	17,011	(10)	(3)	16,998
TOTAL	32,384	19	(3)	32,400
PRODUCTION MAINT				
LABOR	17,610			17,610
NON-LABOR	30,393	(12)		30,381
TOTAL	48,003	(12)	0	47,991
PRODUCTION - TOTAL				
LABOR	32,983	29	0	33,012
NON-LABOR	47,404	(22)	(3)	47,379
TOTAL	80,387	7	(3)	80,391

HAWAIIAN ELECTRIC COMPANY, INC.
TEST YEAR 2009 (\$1000S)

	<u>BUDGET</u>	<u>BUD ADJ</u>	<u>NORM</u>	<u>DIRECT</u>
R. Young				
TRANSMISSION O & M EXPENSE				
TRANSMISSION OPER				
LABOR	2,902			2,902
NON-LABOR	4,114	(65)		4,049
TOTAL	7,016	(65)	0	6,951
TRANSMISSION MAINT				
LABOR	2,083			2,083
NON-LABOR	4,926	7		4,933
TOTAL	7,009	7	0	7,016
TRANSMISSION - TOTAL				
LABOR	4,985	0	0	4,985
NON-LABOR	9,040	(58)	0	8,982
TOTAL	14,025	(58)	0	13,967

HAWAIIAN ELECTRIC COMPANY, INC.
TEST YEAR 2009 (\$1000S)

	<u>BUDGET</u>	<u>BUD ADJ</u>	<u>NORM</u>	<u>DIRECT</u>
R. Young				
DISTRIBUTION O & M EXPENSE				
DISTRIBUTION OPER				
LABOR	6,712			6,712
NON-LABOR	6,945	(44)		6,901
TOTAL	13,657	(44)	0	13,613
DISTRIBUTION MAINT				
LABOR	5,760			5,760
NON-LABOR	11,094	25		11,119
TOTAL	16,854	25	0	16,879
DISTRIBUTION - TOTAL				
LABOR	12,472	0	0	12,472
NON-LABOR	18,039	(19)	0	18,020
TOTAL	30,511	(19)	0	30,492

HAWAIIAN ELECTRIC COMPANY, INC.
TEST YEAR 2009 (\$1000S)

	<u>BUDGET</u>	<u>BUD ADJ</u>	<u>NORM</u>	<u>DIRECT</u>
D. Yamamoto				
CUSTOMER ACCTS EXPENSE				
901 SUPERVISION				
LABOR	177			177
NON-LABOR	1,481			1,481
TOTAL 901	1,658	0	0	1,658
902 METER READING EXPENSES				
LABOR	3,016			3,016
NON-LABOR	529			529
TOTAL 902	3,545	0	0	3,545
903 CUSTOMER RECORDS & COLLECT EXP				
LABOR	4,909			4,909
NON-LABOR	5,877	(35)		5,842
TOTAL 903	10,786	(35)	0	10,751
SUBTOTAL	15,989	(35)	0	15,954
904 UNCOLLECTIBLE ACCOUNTS				
NON-LABOR	1,093	190		1,283
TOTAL 904	1,093	190	0	1,283
905 MISC CUSTOMER ACCOUNTS EXP				
NON-LABOR	0			0
TOTAL 905	0	0	0	0
TOTAL	17,082	155	0	17,237
CUSTOMER ACCOUNTS - TOTAL				
LABOR	8,102			8,102
NON-LABOR	8,980	155		9,135
TOTAL	17,082	155	0	17,237

HAWAIIAN ELECTRIC COMPANY, INC.
TEST YEAR 2009 (\$1000S)

	<u>BUDGET</u>	<u>BUD ADJ</u>	<u>NORM</u>	<u>DIRECT</u>
A. Hee				
CUSTOMER SVC EXPENSE				
909 SUPERVISION				
LABOR	393			393
NON-LABOR	39	(5)		34
TOTAL 909	432	(5)	0	427
910 CUSTOMER ASSISTANCE EXP				
LABOR	3,407	(434)		2,973
NON-LABOR	22,809	(20,244)	(127)	2,438
TOTAL 910	26,216	(20,678)	(127)	5,411
911 INFORMATIONAL ADVERTISING EXP				
LABOR	32			32
NON-LABOR	1,116			1,116
TOTAL 911	1,148	0	0	1,148
912 MISC CUSTOMER SERVICE EXPENSES				
LABOR	0			0
NON-LABOR	21			21
TOTAL 911	21	0	0	21
CUSTOMER SERVICE - TOTAL				
LABOR	3,832	(434)	0	3,398
NON-LABOR	23,985	(20,249)	(127)	3,609
TOTAL	27,817	(20,683)	(127)	7,007

HAWAIIAN ELECTRIC COMPANY, INC.
TEST YEAR 2009 (\$1000S)

	<u>BUDGET</u>	<u>BUD ADJ</u>	<u>NORM</u>	<u>DIRECT</u>
P. Nanbu				
ADMIN & GENL O & M EXPENSE				
ADMINISTRATIVE				
920 ADMIN & GENL EXP - LABR				
LABOR	19,410	56		19,466
NON-LABOR	2,988	(2,988)		0
TOTAL 920	22,398	(2,932)	0	19,466
921 ADMIN & GENL EXP - NLABR				
NON-LABOR	16,780	(555)		16,225
TOTAL 921	16,780	(555)	0	16,225
922 ADMIN EXPENSES TRANSFERRED				
NON-LABOR	(3,487)	228		(3,259)
TOTAL 922	(3,487)	228	0	(3,259)
TOTAL ADMINISTRATIVE	35,691	(3,259)	0	32,432
OUTSIDE SERVICES				
923010 OUTSIDE SERVICES - LEGAL				
NON-LABOR	131			131
TOTAL 923020	131	0	0	131
923020 OUTSIDE SERVICES - OTHER				
NON-LABOR	2,535			2,535
TOTAL 923020	2,535	0	0	2,535
923030 OUTSIDE SERVICES - ASSOC CO				
NON-LABOR	0			0
TOTAL 923030	0	0	0	0
TOTAL OS SVCS	2,666	0	0	2,666
TOTAL 920-923 EXPENSE	38,357	(3,259)	0	35,098

HAWAIIAN ELECTRIC COMPANY, INC.
TEST YEAR 2009 (\$1000S)

	<u>BUDGET</u>	<u>BUD ADJ</u>	<u>NORM</u>	<u>DIRECT</u>
R. Harris				
INSURANCE EXPENSE				
INSURANCE				
924 PROPERTY INSURANCE				
LABOR	216			216
NON-LABOR	2,926	(80)		2,846
TOTAL 924	3,142	(80)	0	3,062
925 INJURIES & DAMAGES				
LABOR	1,450			1,450
NON-LABOR	6,025	(120)		5,905
TOTAL 925	7,475	(120)	0	7,355
TOTAL INSURANCE	10,617	(200)	0	10,417

HAWAIIAN ELECTRIC COMPANY, INC.
TEST YEAR 2009 (\$1000S)

	<u>BUDGET</u>	<u>BUD ADJ</u>	<u>NORM</u>	<u>DIRECT</u>
J. Price				
EMPLOYEE BENEFITS EXPENSE				
EMPLOYEE BENEFITS				
926000 EMPL PENSIONS AND BENEFITS				
LABOR	841			841
NON-LABOR	23,210	(2,854)		20,356
TOTAL 926000	24,051	(2,854)	0	21,197
926010 EMPL BENEFITS - FLEX CREDITS				
LABOR	211			211
NON-LABOR	10,999	(37)		10,962
TOTAL 926010	11,210	(37)	0	11,173
926020 EMPL BENEFITS TRANSFER				
NON-LABOR	(9,655)	692		(8,963)
TOTAL 926020	(9,655)	692	0	(8,963)
TOTAL EMP BEN	25,606	(2,199)	0	23,407

HAWAIIAN ELECTRIC COMPANY, INC.
TEST YEAR 2009 (\$1000S)

	<u>BUDGET</u>	<u>BUD ADJ</u>	<u>NORM</u>	<u>DIRECT</u>
B. Tamashiro				
OTHER ADMINISTRATIVE & GENERAL EXPENSE				
OTHER ADMIN & GENL				
928 REGULATORY COMMISSION EXPENSES				
NON-LABOR	759		(320)	439
TOTAL 928	759	0	(320)	439
9301 INSTITUTN/GOODWILL ADVERT EXP				
LABOR	14			14
NON-LABOR	22			22
TOTAL 9301	36	0	0	36
9302 MISCELLANEOUS GENERAL EXPENSES				
LABOR	316	(101)		215
NON-LABOR	3,888	(295)		3,593
TOTAL 9302	4,204	(396)	0	3,808
931 RENTS EXPENSE				
NON-LABOR	3,026	36		3,062
TOTAL 932	3,026	36	0	3,062
932 ADMIN AND GENL MAINTENANCE				
LABOR	195	3		198
NON-LABOR	398	85		483
TOTAL 932	593	88	0	681
TOTAL OTHER A&G	8,618	(272)	(320)	8,026
TOTAL A&G	83,198	(5,930)	(320)	76,948
ADMIN & GENL - TOTAL				
LABOR	22,653	(42)	0	22,611
NON-LABOR	60,545	(5,888)	(320)	54,337
TOTAL	83,198	(5,930)	(320)	76,948

HAWAIIAN ELECTRIC COMPANY, INC.
TEST YEAR 2009 (\$1000S)

	<u>BUDGET</u>	<u>BUD ADJ</u>	<u>NORM</u>	<u>DIRECT</u>
OTHER O&M - TOTAL				
LABOR	85,027	(447)	0	84,580
NON-LABOR	167,993	(26,081)	(450)	141,462
TOTAL	253,020	(26,528)	(450)	226,042

Hawaiian Electric Company, Inc.
Docket No. 2008-0083, Test-Year 2009

	Phase	2007 No. of Bills from Rate Runs			Source	TY 2009 No. of Bills			Source
		Total	Secondary	Primary		Total	Secondary	Primary	
Schedule R/E	1	3,147,919	3,147,919		Report 102	3,141,217	3,141,217	0	Sales & Bills
	3	1,543	1,543			1,571	1,571	0	Sales & Bills
	Total	3,149,462	3,149,462	0		3,142,788	3,142,788	0	
Schedule G	1	182,427	182,427		Report 102	193,101	193,101	0	Sales & Bills
	3	116,562	116,562			126,603	126,603	0	Sales & Bills
	Total	298,989	298,989	0		319,704	319,704	0	
Schedule J - DP (J3)	1	55		55	Report 104	54		54	Calc
	3	1,527		1,527		1,507		1,507	Calc
	Total	1,582	0	1,582		1,561	0	1,561	DP Voltage Sales & Bills
Schedule J - DS (J4)	1	12		12	Report 104	12		12	Calc
	3	293		293		293		293	Calc
	Total	305	0	305		305	0	305	DS Voltage Sales & Bills
Total J - Primary Voltage	1	67	0	67	Calc	66	0	66	Calc
	3	1,820	0	1,820		1,800	0	1,800	Calc
	Total	1,887	0	1,887		1,866	0	1,866	
Schedule J - Sec (J)	1	6,446	6,446		Report 104	7,144	7,144		Calc
	3	74,501	74,501			73,208	73,208		Calc
	Total	80,947	80,947	0		80,352	80,352	0	
Schedule J - Nwk (J5)	1	0	0		Report 104	0	0		Network Sales & Bills
	3	285	285			282	282		Network Sales & Bills
	Total	285	285	0		282	282	0	
Total J - Sec	1	6,446	6,446	0	Calc	7,144	7,144	0	
	3	74,786	74,786	0		73,490	73,490	0	
	Total	81,232	81,232	0		80,634	80,634	0	
Schedule J Total	1	6,513	6,446	67	Calc	7,210	7,144	66	Service Phase
	3	76,606	74,786	1,820		75,290	73,490	1,800	Service Phase
	Total	83,119	81,232	1,887		82,500	80,634	1,866	
Schedule H/K	1	2,669	2,669			0	0		Service Phase & kW
	3	6,348	6,348			0	0		Service Phase & kW
	Total	9,017	9,017	0		8,952	0	0	
Schedule PS	3		2,349		Report 104	3,936	3,936		Sales & Bills
Schedule PP	3			2,112	Report 104	0		0	Sales & Bills
Schedule PT	3			73	Report 104	300		300	Sales & Bills
Total P	Total	0	2,349	2,185		4,236	3,936	300	
Schedule F - Pri									
Metered (F, Non F2,F6)	1	600		600	Report 212	609		609	Calc
Unmetered (F2)	1	3,709		3,709	Report 203	3,767		3,767	Calc
	Total	4,309	0	4,309		4,376	0	4,376	Sales & Bills
Schedule F - Sec									
Metered (F6)	1	900	900		Report 203	916	916		
Flat	1	0	0			0			
	Total	900	900	0		916	916	0	Sales & Bills (Secondary Metering)
Schedule F - Total									
Metered (Sec Only)	1	900	900	0		916	916	0	
Unmetered	1	3,709	0	3,709		3,767	0	3,767	
	Total	4,609	900	3,709		4,683	916	3,767	

Hawaiian Electric Company, Inc.
Docket No. 2008-0083, Test-Year 2009
Weighting Factors For Primary Dist. Lines By Customer Classes

Rate Class	Phase	(A)	(B)	(C)	(D = B + C)	(E = A x D)	TY 2007 C1 Fct (R = 1)
		Wt.	Test-Year No. of Bills			Weighted No. of Bills	
			Pri	Sec	Total		
R/E	1	1		3,141,217	3,141,217	3,141,217	
	3	2		1,571	1,571	3,142	
	Total			3,142,788	3,142,788	3,144,359	1.00
G	1	1		193,101	193,101	193,101	
	3	2		126,603	126,603	253,206	
	Total			319,704	319,704	446,307	1.40
J	1	1	66	7,144	7,210	7,210	
	3	2	1,507	73,490	74,997	149,994	
	Total		1,573	80,634	82,207	157,204	1.91
Total J ¹					82,500		
H/K	1	1		0	0	0	
	3	2		0	0	0	
	Total			0	0	0	#DIV/0!
PS	3	2		3,936	3,936	7,872	1.86
PP	3	2	0		0	0	0.00
Total			0	3,936	3,936	7,872	1.86
Total P ¹	3	2			4,236		
F	1	1	4,376	916	5,292	5,292	1.00
Total			4,376	916	5,292		

¹ Total number of bills in the class.

Hawaiian Electric Company, Inc.
Docket No. 2008-0083, Test-Year 2009
Weighting Factors for Secondary Dist. Lines By Customer Classes

Rate Class	Phase	(A)	(B)	(C)	(D = C)	(E = A x D)	TY 2007 C2 Fct (R = 1)
		Wt.	Pri	Test-Year No. of Bills Sec	Total	Weighted No. of Bills	
R/E	1	1		3,141,217	3,141,217	3,141,217	
	3	1.33		1,571	1,571	2,089	
	Total			3,142,788	3,142,788	3,143,306	1.00
G	1	1		193,101	193,101	193,101	
	3	1.33		126,603	126,603	168,382	
	Total			319,704	319,704	361,483	1.13
J	1	1		7,144	7,144	7,144	
	3	1.33		73,490	73,490	97,742	
	Total			80,634	80,634	104,886	1.27
Total J					82,500		
H/K	1	1		0	0	0	
	3	1.33		0	0	0	
	Total			0	0	0	#DIV/0!
PS ¹	3	1.33		3,936	3,936	5,235	
	3	1.33		3,936	3,936		1.24
Total P ¹					4,236		
F	1	1		916	916	916	0.20
Total F ¹					4,683		

* Weight of 1.33 is based on 4/3.

¹ Weighted no. of bills/total class bills. Total J bills include total J class. Total PS bills incl PP and PT customers. Total F bills include all F customers.

Hawaiian Electric Company, Inc.
Docket No. 2008-0083, Test-Year 2009
Weighting Factors For Transformers By Customer Classes

	Phase	(A) TY 2007 No. of Bills No.	(B) % of Bills	(C) Typical Cost \$/Transf	(D) No. of Cust. Per transf.	(E = C ÷ D) Typical Cost \$/Cust	(F = B x E) Weighted Cost \$/Cust	TY 2007 C3 Fct (R = 1)
Schedule R/E	1	3,141,217	99.95%	\$5,005	14	\$358	\$358	
	3	1,571	0.05%	\$11,416	14	\$815	\$0	
	Total	3,142,788	100.00%				\$358	1.00
Schedule G	1	193,101	60.40%	\$5,005	5	\$1,001	\$605	
	3	126,603	39.60%	\$11,416	1	\$11,416	\$4,521	
	Total	319,704	100.00%				\$5,126	14.32
Schedule J - DP	1	54	3.46%			#DIV/0!	#DIV/0!	
	3	1,507	96.54%			#DIV/0!	#DIV/0!	
	Total	1,561	100.00%					
Schedule J - DS	1	12	3.93%			#DIV/0!	#DIV/0!	
	3	293	96.07%			#DIV/0!	#DIV/0!	
	Total	305	100.00%					
Total J - Pri	1	66	3.54%				#DIV/0!	
	3	1,800	96.46%				#DIV/0!	
	Total	1,866	100.00%					
Schedule J - Sec	1	7,144	8.89%	\$5,005	1	\$5,005	\$445	
	3	73,208	91.11%	\$11,416	1	\$11,416	\$10,401	
	Total	80,352	100.00%					
Schedule J - Nwk	1	0	0.00%	\$5,005	1	\$5,005	\$0	
	3	282	100.00%	\$11,416	1	\$11,416	\$11,416	
	Total	282	100.00%				\$11,416	
Total J - Sec	1	7,144	8.86%				\$445	
	3	73,490	91.14%				\$21,817	
	Total	80,634	100.00%				\$22,262	
Schedule J Total	1	7,210	8.74%	\$5,005	1	\$5,005	\$437	
	3	75,290	91.26%	\$11,416	1	\$11,416	\$10,418	
	Total	82,500	100.00%				\$10,855	30.32
Schedule H/K	1	0	#DIV/0!	\$5,005	5	\$1,001	#DIV/0!	
	3	0	#DIV/0!	\$11,416	1	\$11,416	#DIV/0!	
	Total	0	#DIV/0!				#DIV/0!	#DIV/0!
Schedule PS	3	3,936	100.00%	\$21,065	1	\$21,065	\$21,065	58.84
Schedule PP	3	0	#DIV/0!		1	\$0	#DIV/0!	
Schedule PT	3	300	100.00%		1	\$0	\$0	
Total P	3	4,236	100.00%				\$19,573	54.67
Schedule F - Pri								
Metered	1	609	13.92%		1	\$0	\$0	
Unmetered	1	3,767	86.08%		1	\$0	\$0	
	Total	4,376	100.00%				\$0	
Schedule F - Sec								
Metered	1	916	100.00%	\$5,005	1	\$5,005	\$5,005	
Flat	1	0	0.00%				\$0	
	Total	916	100.00%				\$5,005	
Schedule F - Total								
Metered (Sec Only)	1	916	19.56%	\$5,005	1	\$5,005	\$979	2.73
Unmetered	1	3,767	80.44%				\$0	
	Total	4,683	100.00%				\$979	2.73

Hawaiian Electric Company, Inc.
Docket No. 2008-0083, Test-Year 2009
Weighting Factors For Service Drops Costs By Customer Classes

	Phase	(A) TY 2007 No. of Bills No.	(B) % %	(C) Serv Drop Size kW/Cust	(D) Typical Cost \$/Service Drop	(E = B x D) Weighted Cost \$/Cust	TY 2007 C4 Fct (R = 1)
Schedule R/E	1	3,141,217	99.95%	5	\$322	\$322	
	3	1,571	0.05%	5	\$374	\$0	
	Total	3,142,788	100.00%	5		\$322	1.00
Schedule G	1	193,101	60.40%	10	\$322	\$194	
	3	126,603	39.60%	25	\$374	\$148	
	Total	319,704	100.00%			\$342	1.06
Schedule J - DP	1	54	3.46%		\$1,126	\$39	
	3	1,507	96.54%		\$1,281	\$1,237	
	Total	1,561	100.00%			\$1,276	
Schedule J - DS	1	12	3.93%		\$1,126	\$44	
	3	293	96.07%		\$1,281	\$1,231	
	Total	305	100.00%			\$1,275	
Total J - Pri	1	66	3.54%		\$1,126	\$83	
	3	1,800	96.46%		\$1,281	\$2,468	
	Total	1,866	100.00%			\$2,551	
Schedule J - Sec	1	7,144	8.89%	50	\$490	\$44	
	3	73,208	91.11%	60	\$448	\$408	
	Total	80,352	100.00%			\$452	
Schedule J - Nwk	1	0	0.00%	50	\$490	\$0	
	3	282	100.00%	60	\$448	\$448	
	Total	282	100.00%			\$448	
Total J - Sec	1	7,144	8.86%	50	\$490	\$44	
	3	73,490	91.14%	60	\$448	\$856	
	Total	80,634	100.00%			\$900	
Schedule J Total	1	7,210	8.74%			\$496	
	3	75,290	91.26%			\$468	
	Total	82,500	100.00%			\$964	2.99
Schedule H/K	1	0	#DIV/0!	10	\$322	#DIV/0!	
	3	0	#DIV/0!	25	\$374	#DIV/0!	
	Total	0	#DIV/0!			#DIV/0!	#DIV/0!
Schedule PS	3	3,936	100.00%	500	\$640	\$640	1.99
Schedule PP	3	0	#DIV/0!	440	\$1,281	#DIV/0!	#DIV/0!
Schedule PT	3	300	100.00%	6000	\$11,948	\$11,948	37.11
Total P	3	4,236	100.00%			1440.85	4.47
Schedule F - Pri							
Metered	1	609	13.92%	60	\$1,126	\$157	
Unmetered	1	3,767	86.08%			\$0	
	Total	4,376	4,376		\$1,126	\$157	
Schedule F - Sec							
Metered	1	916	100.00%	1	\$159	\$159	
Flat	1	0	0.00%			\$0	
	Total	916	100.00%		\$159	#DIV/0!	
Schedule F - Total Metered Only							
Pri	1	609	39.93%	60	\$1,126	\$450	
Sec	1	916	60.07%	1	\$159	\$96	
	Total	1,525	100.00%			\$546	1.70

Hawaiian Electric Company, Inc.
Docket No. 2008-0083, Test-Year 2009
Weighting Factors For Meter Costs By Customer Classes

	Phase	(A) TY 2007 No. No.	(B) No. of Bills %	(C) Typical Cost \$/Meter	(D = B x C) Weighted Cost \$/Cust	TY 2007 C5 Fct (R = 1)	TY 2005 C5 Fct (R = 1)
Schedule R/E	1	3,141,217	99.95%	\$94	\$94		
	3	1,571	0.05%	\$217	\$0		
	Total	3,142,788	100.00%		\$94	1.00	1.00
Schedule G	1	193,101	60.40%	\$94	\$57		
	3	126,603	39.60%	\$217	\$86		
	Total	319,704	100.00%		\$143	1.52	1.52
Schedule J - DP	1	54	3.46%	\$2,492	\$86		
	3	1,507	96.54%	\$5,580	\$5,387		
	Total	1,561	100.00%		\$5,473		
Schedule J - DS	1	12	3.93%	\$2,492	\$98		
	3	293	96.07%	\$5,580	\$5,361		
	Total	305	100.00%		\$5,459		
Total J - Pri	1	66	3.54%	\$2,492	\$184		
	3	1,800	96.46%	\$5,580	\$10,748		
	Total	1,866	100.00%		\$10,932		
Schedule J - Sec	1	7,144	8.89%	\$502	\$45		
	3	73,208	91.11%	\$832	\$758		
	Total	80,352	100.00%		\$803		
Schedule J - Nwk	1	0	0.00%	\$502	\$0		
	3	282	100.00%	\$832	\$832		
	Total	282	100.00%		\$832		
Total J - Sec	1	7,144	8.86%	\$502	\$45		
	3	73,490	91.14%	\$832	\$1,590		
	Total	80,634	100.00%		\$1,635		
Schedule J Total	1	7,210	8.74%		\$520		
	3	75,290	91.26%		\$946		
	Total	82,500	100.00%		\$1,466	15.60	15.08
Schedule H/K	1	0	#DIV/0!	\$94	#DIV/0!		
	3	0	#DIV/0!	\$217	#DIV/0!		
	Total	0	#DIV/0!		#DIV/0!	#DIV/0!	1.95
Schedule PS	3	3,936	100.00%	\$1,092	\$1,092	11.62	11.97
Schedule PP	3	0	#DIV/0!	\$5,580	#DIV/0!	#DIV/0!	49.33
Schedule PT	3	300	100.00%	\$48,614	\$48,614	517.17	334.48
Total P	3	4,236	100.00%		\$4,457	47.41	32.77
Schedule F - Pri							
Metered	1	609	13.92%	\$2,492	\$347		
Unmetered	1	3,767	86.08%		\$0		
	Total	4,376	100.00%		\$347		
Schedule F - Sec							
Metered	1	916	100.00%	\$502	\$502		
Flat	1	0	0.00%		\$0		
	Total	916	100.00%		\$502		
Schedule F - Total Metered							
Pri	1	609	39.93%	\$2,492	\$995		
Sec	1	916	60.07%	\$502	\$302		
	Total	1,525	100.00%		\$1,297	13.80	11.50
Schedule F - Total Class							
Metered	1	1,525	28.82%	\$1,297	\$374		
Unmetered	1	3,767	71.18%	0	\$0		
	Total	5,292			\$374	3.98	3.72

Hawaiian Electric Company, Inc.
Docket No. 2008-0083, Test-Year 2009
Weighting Factors For Customer Accounts Expenses Excl Uncollectibles

NARUC ACCT	TY 2009 Exp (\$000s)	% Of Total		CSD Activity		Relative Customer Cost (R = 1)															
		By Acct	Acct 902, 903			R/E	G	J - Pri	J - Sec	Total J	H	K	HK*	PS	PP	PT	F	U			
901	\$1,657.7																				
902	\$3,544.5	24.79%	Access Travel	Mtr Reading &	55.00%	1.00	1.17	3.16	3.16	3.16	1.17	1.17	1.17	4.14	4.30	3.00	2.50	7.83			
					45.00%	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
903	\$10,751.0	75.21%	CSD RA Codes	TY 2009 (\$)		1.00	1.00	2.00	2.00	2.00	1.50	1.50	1.50	3.00	3.00	3.00	1.50	5.00			
					CB	\$457,804	3.61%	1.00	2.00	3.00	3.00	3.00	2.00	2.00	2.00	3.00	3.00	3.00	0.50	0.00	
					CD	\$504,042	3.97%	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	
					CH	\$2,752,454	21.68%	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	
					CP	\$3,459,351	27.24%	1.00	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	
					CF	\$435,075	3.43%	1.00	2.00	2.70	2.70	2.70	1.00	1.00	1.00	2.70	2.70	2.70	1.00	0.00	
					CG	\$1,158,110	9.12%	1.00	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.00	1.00	1.00	1.00	0.00	
					CM	\$80,099	0.62%	1.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	0.50	0.50	0.50	1.00	0.00	
					CA	\$3,295,054	25.71%	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
					CS	\$586,580	4.62%	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
					Total	\$12,698,569	100.00%														
								Wtg Fct		1.00	1.28	1.36	1.36	1.36	1.25	1.25	1.25	1.13	1.13	1.13	0.92
			C6 Fct		1.00	1.23	1.56	1.56	1.56	1.21	1.21	1.21	1.53	1.55	1.37	1.14	1.86				

Hawaiian Electric Company, Inc.
Docket No. 2008-0083, Test-Year 2009
Weighting Factors For Customer Accounts Uncollectibles (Account 904)

Account 904 UNCOLLECTIBLE - by Rate Class															
%	R	E	R/E	G	J - Pri	J - Sec	Total J	H	K	H/K*	PS	PP	PT	F	U
100.00%	69.86%	0.07%	69.93%	7.64%			16.52%			0.69%	3.48%	1.72%	0.00%	0.02%	0.00%
													Schedule P Wtd: 3.00%		

Account 909			Account 910 - NON-DSM					Account 911		Account 912		Cust Serv Ex Account 909-		
Schedule R/E	No. Cust.	% of Total Customers	ESD¹	Total	ALL Div Excl Ed & Cons Affairs, SN, SR Divs.¹	Ed & Cons Affairs²	ESD - SN & SR Divs³	Total	Corp Comm, Environ, ESD¹	CSD¹	Total	Total	NON-DSM (\$000s)	TOTAL CUST SERV EXP (C8 FCT, %)
Schedule R/E	261,768													
	131													
	261,899	88.432%	\$306.0		\$753.7	\$718.4		\$1,472.1	\$1,015.2	\$18.6		\$2,811.9	60.251%	
Schedule G	16,092													
	10,550													
	26,642	8.996%	\$31.1		\$76.7			\$76.7	\$103.3	\$1.9		\$213.0	4.564%	
Schedule J - DP	5													
	126													
	130													
Schedule J - DS	1													
	24													
	25													
Schedule J - Pri	6													
	150													
	156													
Schedule J - Sec	595													
	6,101													
	6,696													
Schedule J - Nwk	0													
	24													
	24													
Schedule J - Sec	595													
	6,124													
	6,720													
Schedule J Total	601													
	6,274													
	6,875	2.321%	\$8.0		\$19.8		\$1,504.1	\$1,523.9	\$26.6	\$0.5		\$1,559.0	33.405%	
Schedule H/K	0													
	0													
	0	0.000%	\$0.0		\$0.0			\$0.0	\$0.0	\$0.0		\$0.0	0.000%	
Schedule PS	328	0.111%	\$0.4		\$0.9		\$71.8	\$72.7	\$1.3	\$0.0		\$74.4	1.594%	
	0	0.000%	\$0.0		\$0.0		\$0.0	\$0.0	\$0.0	\$0.0		\$0.0	0.000%	
	25	0.008%	\$0.0		\$0.1		\$5.5	\$5.6	\$0.1	\$0.0		\$5.7	0.122%	
Schedule F - Pri	353													
	51													
	314													
Schedule F - Sec	365													
	76													
	0													
Schedule F - Total	76													
	314													
	390	0.132%	\$0.5		\$1.1			\$1.1	\$1.5	\$0.0		\$3.1	0.066%	
TOTAL	296,159	100.000%	\$346.0		\$852.3	\$718.4	\$1,581.3	\$3,152.0	\$1,148.0	\$21.0		\$4,667.0	100.002%	
			\$346.0		\$852.3		\$1,581.4	\$3,152.1	\$1,148.0	\$21.0		\$4,667.1		

¹ Allocation basis - % of customers (all rate classes).

² Allocation basis - 100% residential class. See e-mail from K. DeSilva dated 3/26/04.

³ Allocate to Schedules J, PS, PP, and PT.

Hawaiian Electric Company, Inc.
Docket No. 2008-0083, Test-Year 2009

	Phase	2007 No. of Bills from Rate Runs			Source	TY 2009 No. of Bills			Source
		Total	Secondary	Primary		Total	Secondary	Primary	
Schedule R/E	1	3,147,919	3,147,919		Report 102	3,141,216	3,141,216	0	Sales & Bills
	3	1,543	1,543			1,571	1,571	0	Sales & Bills
	Total	3,149,462	3,149,462	0		3,142,787	3,142,787	0	
Schedule G	1	182,427	182,427		Report 102	192,348	192,348	0	Sales & Bills
	3	116,562	116,562			122,976	122,976	0	Sales & Bills
	Total	298,989	298,989	0		315,324	315,324	0	
Schedule J - DP (J3)	1	55		55	Report 104	54		54	Calc
	3	1,527		1,527		1,507		1,507	Calc
	Total	1,582	0	1,582		1,561	0	1,561	DP Voltage Sales & Bills
Schedule J - DS (J4)	1	12		12	Report 104	12		12	Calc
	3	293		293		294		294	Calc
	Total	305	0	305		306	0	306	DS Voltage Sales & Bills
Total J - Primary Voltage	1	67	0	67	Calc	66	0	66	Calc
	3	1,820	0	1,820		1,801	0	1,801	Calc
	Total	1,887	0	1,887		1,867	0	1,867	
Schedule J - Sec (J)	1	6,446	6,446		Report 104	6,373	6,373		Calc
	3	74,501	74,501			71,962	71,962		Calc
	Total	80,947	80,947	0		78,335	78,335	0	
Schedule J - Nwk (J5)	1	0	0		Report 104	0	0		Network Sales & Bills
	3	285	285			282	282		Network Sales & Bills
	Total	285	285	0		282	282	0	
Total J - Sec	1	6,446	6,446	0	Calc	6,373	6,373	0	
	3	74,786	74,786	0		72,244	72,244	0	
	Total	81,232	81,232	0		78,617	78,617	0	
Schedule J Total	1	6,513	6,446	67	Calc	6,439	6,373	66	Service Phase
	3	76,606	74,786	1,820		74,045	72,244	1,801	Service Phase
	Total	83,119	81,232	1,887		80,484	78,617	1,867	
Schedule H/K	1	2,669	2,669			1,887	1,887		Service Phase & kW
	3	6,348	6,348			4,509	4,509		Service Phase & kW
	Total	9,017	9,017	0		8,952	6,396	0	
Schedule PS	3		2,349		Report 104	2,316	2,316		Sales & Bills
Schedule PP	3			2,112	Report 104	1,873		1,873	Sales & Bills
Schedule PT	3			73	Report 104	47		47	Sales & Bills
Total P	Total	0	2,349	2,185		4,236	2,316	1,920	
Schedule F - Pri									
Metered (F, Non F2,F6)	1	600		600	Report 212	609		609	Calc
Unmetered (F2)	1	3,709		3,709	Report 203	3,767		3,767	Calc
	Total	4,309	0	4,309		4,376	0	4,376	Sales & Bills
Schedule F - Sec									
Metered (F6)	1	900	900		Report 203	916	916		
Flat	1	0	0			0			
	Total	900	900	0		916	916	0	Sales & Bills (Secondary Metering)
Schedule F - Total									
Metered (Sec Only)	1	900	900	0		916	916	0	
Unmetered	1	3,709	0	3,709		3,767	0	3,767	
	Total	4,609	900	3,709		4,683	916	3,767	

Hawaiian Electric Company, Inc.
Docket No. 2008-0083, Test-Year 2009
Weighting Factors For Primary Dist. Lines By Customer Classes

Rate Class	Phase	(A)	(B)	(C)	(D = B + C)	(E = A x D)	TY 2007 C1 Fct (R = 1)
		Wt.	Test-Year No. of Bills			Weighted No. of Bills	
			Pri	Sec	Total		
R/E	1	1		3,141,216	3,141,216	3,141,216	
	3	2		1,571	1,571	3,142	
	Total			3,142,787	3,142,787	3,144,358	1.00
G	1	1		192,348	192,348	192,348	
	3	2		122,976	122,976	245,952	
	Total			315,324	315,324	438,300	1.39
J	1	1	66	6,373	6,439	6,439	
	3	2	1,507	72,244	73,751	147,502	
	Total		1,573	78,617	80,190	153,941	1.91
Total J ¹					80,484		
H/K	1	1		1,887	1,887	1,887	
	3	2		4,509	4,509	9,018	
	Total			6,396	6,396	10,905	1.70
PS	3	2		2,316	2,316	4,632	1.09
PP	3	2	1,873		1,873	3,746	0.88
Total			1,873	2,316	4,189	8,378	1.98
Total P ¹	3	2			4,236		
F	1	1	4,376	916	5,292	5,292	1.00
Total			4,376	916	5,292		

¹ Total number of bills in the class.

Hawaiian Electric Company, Inc.
Docket No. 2008-0083, Test-Year 2009
Weighting Factors for Secondary Dist. Lines By Customer Classes

Rate Class	Phase	(A)	(B)	(C)		(D = C)	(E = A x D)	TY 2007 C2 Fct (R = 1)
		Wt.	Pri	Test-Year No. of Bills	Sec	Total	Weighted No. of Bills	
R/E	1	1			3,141,216	3,141,216	3,141,216	
	3	1.33			1,571	1,571	2,089	
	Total				3,142,787	3,142,787	3,143,305	1.00
G	1	1			192,348	192,348	192,348	
	3	1.33			122,976	122,976	163,558	
	Total				315,324	315,324	355,906	1.13
J	1	1			6,373	6,373	6,373	
	3	1.33			72,244	72,244	96,085	
	Total				78,617	78,617	102,458	1.27
Total J						80,484		
H/K	1	1			1,887	1,887	1,887	
	3	1.33			4,509	4,509	5,997	
	Total				6,396	6,396	7,884	1.23
PS ¹	3	1.33			2,316	2,316	3,080	
	3	1.33			2,316	2,316		0.73
Total P ¹						4,236		
F	1	1			916	916	916	0.20
Total F ¹						4,683		

* Weight of 1.33 is based on 4/3.

¹ Weighted no. of bills/total class bills. Total J bills include total J class. Total PS bills incl PP and PT customers. Total F bills include all F customers.

Hawaiian Electric Company, Inc.
Docket No. 2008-0083, Test-Year 2009
Weighting Factors For Transformers By Customer Classes

	Phase	(A) TY 2007 No. of Bills No.	(B) No. of Bills %	(C) Typical Cost \$/Transf	(D) No. of Cust. Per transf.	(E = C ÷ D) Typical Cost \$/Cust	(F = B x E) Weighted Cost \$/Cust	TY 2007 C3 Fct (R = 1)
Schedule R/E	1	3,141,216	99.95%	\$5,005	14	\$358	\$358	
	3	1,571	0.05%	\$11,416	14	\$815	\$0	
	Total	3,142,787	100.00%				\$358	1.00
Schedule G	1	192,348	61.00%	\$5,005	5	\$1,001	\$611	
	3	122,976	39.00%	\$11,416	1	\$11,416	\$4,452	
	Total	315,324	100.00%				\$5,063	14.14
Schedule J - DP	1	54	3.46%			#DIV/0!	#DIV/0!	
	3	1,507	96.54%			#DIV/0!	#DIV/0!	
	Total	1,561	100.00%					
Schedule J - DS	1	12	3.92%			#DIV/0!	#DIV/0!	
	3	294	96.08%			#DIV/0!	#DIV/0!	
	Total	306	100.00%					
Total J - Pri	1	66	3.54%				#DIV/0!	
	3	1,801	96.46%				#DIV/0!	
	Total	1,867	100.00%					
Schedule J - Sec	1	6,373	8.14%	\$5,005	1	\$5,005	\$407	
	3	71,962	91.86%	\$11,416	1	\$11,416	\$10,487	
	Total	78,335	100.00%					
Schedule J - Nwk	1	0	0.00%	\$5,005	1	\$5,005	\$0	
	3	282	100.00%	\$11,416	1	\$11,416	\$11,416	
	Total	282	100.00%				\$11,416	
Total J - Sec	1	6,373	8.11%				\$407	
	3	72,244	91.89%				\$21,903	
	Total	78,617	100.00%				\$22,310	
Schedule J Total	1	6,439	8.00%	\$5,005	1	\$5,005	\$400	
	3	74,045	92.00%	\$11,416	1	\$11,416	\$10,503	
	Total	80,484	100.00%				\$10,903	30.46
Schedule H/K	1	1,887	29.50%	\$5,005	5	\$1,001	\$295	
	3	4,509	70.50%	\$11,416	1	\$11,416	\$8,048	
	Total	6,396	100.00%				\$8,343	23.30
Schedule PS	3	2,316	100.00%	\$21,065	1	\$21,065	\$21,065	58.84
Schedule PP	3	1,873	100.00%		1	\$0	\$0	
Schedule PT	3	47	100.00%		1	\$0	\$0	
Total P	3	4,236	100.00%				\$11,517	32.17
Schedule F - Pri								
Metered	1	609	13.92%		1	\$0	\$0	
Unmetered	1	3,767	86.08%		1	\$0	\$0	
	Total	4,376	100.00%				\$0	
Schedule F - Sec								
Metered	1	916	100.00%	\$5,005	1	\$5,005	\$5,005	
Flat	1	0	0.00%				\$0	
	Total	916	100.00%				\$5,005	
Schedule F - Total								
Metered (Sec Only)	1	916	19.56%	\$5,005	1	\$5,005	\$979	2.73
Unmetered	1	3,767	80.44%				\$0	
	Total	4,683	100.00%				\$979	2.73

Hawaiian Electric Company, Inc.
Docket No. 2008-0083, Test-Year 2009
Weighting Factors For Service Drops Costs By Customer Classes

	(A) TY 2007 No. of Bills	(B) No. of Bills %	(C) Serv Drop Size kW/Cust	(D) Typical Cost \$/Service Drop	(E = B x D) Weighted Cost \$/Cust	TY 2007 C4 Fct (R = 1)
Phase	No.	%				
Schedule R/E	1	3,141,216	99.95%	5	\$322	
	3	1,571	0.05%	5	\$374	
Total	3,142,787	100.00%	5		\$322	1.00
Schedule G	1	192,348	61.00%	10	\$322	
	3	122,976	39.00%	25	\$374	
Total	315,324	100.00%			\$342	1.06
Schedule J - DP	1	54	3.46%		\$1,126	
	3	1,507	96.54%		\$1,281	
Total	1,561	100.00%			\$1,276	
Schedule J - DS	1	12	3.92%		\$1,126	
	3	294	96.08%		\$1,281	
Total	306	100.00%			\$1,275	
Total J - Pri	1	66	3.54%		\$1,126	
	3	1,801	96.46%		\$1,281	
Total	1,867	100.00%			\$2,551	
Schedule J - Sec	1	6,373	8.14%	50	\$490	
	3	71,962	91.86%	60	\$448	
Total	78,335	100.00%			\$452	
Schedule J - Nwk	1	0	0.00%	50	\$490	
	3	282	100.00%	60	\$448	
Total	282	100.00%			\$448	
Total J - Sec	1	6,373	8.11%	50	\$490	
	3	72,244	91.89%	60	\$448	
Total	78,617	100.00%			\$900	
Schedule J Total	1	6,439	8.00%		\$497	
	3	74,045	92.00%		\$468	
Total	80,484	100.00%			\$965	3.00
Schedule H/K	1	1,887	29.50%	10	\$322	
	3	4,509	70.50%	25	\$374	
Total	6,396	100.00%			\$359	1.11
Schedule PS	3	2,316	100.00%	500	\$640	1.99
Schedule PP	3	1,873	100.00%	440	\$1,281	3.98
Schedule PT	3	47	100.00%	6000	\$11,948	37.11
Total P	3	4,236	100.00%		1048.89	3.26
Schedule F - Pri						
Metered	1	609	13.92%	60	\$1,126	
Unmetered	1	3,767	86.08%		\$0	
Total	4,376	4,376			\$1,126	
Schedule F - Sec						
Metered	1	916	100.00%	1	\$159	
Flat	1	0	0.00%		\$0	
Total	916	100.00%			\$159	
Schedule F - Total Metered Only						
Pri	1	609	39.93%	60	\$1,126	
Sec	1	916	60.07%	1	\$159	
Total	1,525	100.00%			\$546	1.70

Hawaiian Electric Company, Inc.
Docket No. 2008-0083, Test-Year 2009
Weighting Factors For Meter Costs By Customer Classes

	Phase	(A) TY 2007 No. No.	(B) No. of Bills %	(C) Typical Cost \$/Meter	(D = B x C) Weighted Cost \$/Cust	TY 2007 C5 Fct (R = 1)	TY 2005 C5 Fct (R = 1)
Schedule R/E	1	3,141,216	99.95%	\$94	\$94		
	3	1,571	0.05%	\$217	\$0		
	Total	3,142,787	100.00%		\$94	1.00	1.00
Schedule G	1	192,348	61.00%	\$94	\$57		
	3	122,976	39.00%	\$217	\$85		
	Total	315,324	100.00%		\$142	1.51	1.52
Schedule J - DP	1	54	3.46%	\$2,492	\$86		
	3	1,507	96.54%	\$5,580	\$5,387		
	Total	1,561	100.00%		\$5,473		
Schedule J - DS	1	12	3.92%	\$2,492	\$98		
	3	294	96.08%	\$5,580	\$5,361		
	Total	306	100.00%		\$5,459		
Total J - Pri	1	66	3.54%	\$2,492	\$184		
	3	1,801	96.46%	\$5,580	\$10,748		
	Total	1,867	100.00%		\$10,932		
Schedule J - Sec	1	6,373	8.14%	\$502	\$41		
	3	71,962	91.86%	\$832	\$764		
	Total	78,335	100.00%		\$805		
Schedule J - Nwk	1	0	0.00%	\$502	\$0		
	3	282	100.00%	\$832	\$832		
	Total	282	100.00%		\$832		
Total J - Sec	1	6,373	8.11%	\$502	\$41		
	3	72,244	91.89%	\$832	\$1,596		
	Total	78,617	100.00%		\$1,637		
Schedule J Total	1	6,439	8.00%		\$523		
	3	74,045	92.00%		\$948		
	Total	80,484	100.00%		\$1,471	15.65	15.08
Schedule H/K	1	1,887	29.50%	\$94	\$28		
	3	4,509	70.50%	\$217	\$153		
	Total	6,396	100.00%		\$181	1.93	1.95
Schedule PS	3	2,316	100.00%	\$1,092	\$1,092	11.62	11.97
Schedule PP	3	1,873	100.00%	\$5,580	\$5,580	59.36	49.33
Schedule PT	3	47	100.00%	\$48,614	\$48,614	517.17	334.48
Total P	3	4,236	100.00%		\$3,604	38.34	32.77
Schedule F - Pri							
Metered	1	609	13.92%	\$2,492	\$347		
Unmetered	1	3,767	86.08%		\$0		
	Total	4,376	100.00%		\$347		
Schedule F - Sec							
Metered	1	916	100.00%	\$502	\$502		
Flat	1	0	0.00%		\$0		
	Total	916	100.00%		\$502		
Schedule F - Total Metered							
Pri	1	609	39.93%	\$2,492	\$995		
Sec	1	916	60.07%	\$502	\$302		
	Total	1,525	100.00%		\$1,297	13.80	11.50
Schedule F - Total Class							
Metered	1	1,525	28.82%	\$1,297	\$374		
Unmetered	1	3,767	71.18%	0	\$0		
	Total	5,292			\$374	3.98	3.72

Hawaiian Electric Company, Inc.
Docket No. 2008-0083, Test-Year 2009
Weighting Factors For Customer Accounts Expenses Excl Uncollectibles

NARUC ACCT	TY 2009 Exp (\$000s)	% Of Total		CSD Activity	Relative Customer Cost (R = 1)														
		By Acct	Acct 902, 903		R/E	G	J - Pri	J - Sec	Total J	H	K	H/K*	PS	PP	PT	F	U		
901	\$1,657.7																		
902	\$3,544.5	24.79%	Mtr Reading & Access Travel	55.00%	1.00	1.17	3.16	3.16	3.16	1.17	1.17	1.17	4.14	4.30	3.00	2.50	7.83		
				45.00%	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
903	\$10,751.0	75.21%	CSD RA Codes	TY 2009 (\$)															
				CB	\$457,804	1.00	1.00	2.00	2.00	2.00	1.50	1.50	1.50	3.00	3.00	3.00	1.50	5.00	
				CD	\$504,042	1.00	2.00	3.00	3.00	3.00	2.00	2.00	2.00	3.00	3.00	3.00	0.50	0.00	
				CH	\$2,752,454	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	
				CP	\$3,459,351	1.00	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	
				CF	\$435,075	1.00	2.00	2.70	2.70	2.70	1.00	1.00	1.00	2.70	2.70	2.70	1.00	0.00	
				CG	\$1,158,110	1.00	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.00	1.00	1.00	1.00	0.00	
				CM	\$80,099	1.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	0.50	0.50	0.50	1.00	0.00	
				CA	\$3,265,054	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
				CS	\$586,580	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
				Total	\$12,698,569	100.00%													
				Wtg Fct		100.00%													
				1.00	1.28	1.36	1.36	1.36	1.36	1.25	1.25	1.25	1.13	1.13	0.92	0.90			
				1.00	1.23	1.56	1.56	1.56	1.56	1.21	1.21	1.21	1.53	1.55	1.37	1.14			
																	1.86		

Hawaiian Electric Company, Inc.
Docket No. 2008-0083, Test-Year 2009
Weighting Factors For Customer Accounts

Account 904 UNCOLLECTIBLE - by Rate Class															
%	R	E	R/E	G	J - Pri	J - Sec	Total J	H	K	H/K*	PS	PP	PT	F	U
100.00%	69.86%	0.07%	69.93%	7.64%			16.52%			0.69%	3.48%	1.72%	0.00%	0.02%	0.00%
											Schedule P Wtd: 3.00%				

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Account 909			Account 910 - NON-DSM					Account 911		Account 912		Cust Serv Ex Account 909-		
		% of Total Customers	ESD¹	Total	ALL Div Excl Ed & Cons Affairs, SN, SR Divs.¹	Ed & Cons Affairs²	ESD - SN & SR Divs³	Total	Corp Comm, Environ, ESD¹	Total	CSD¹	Total	NON-DSM (\$000s)	TOTAL CUST SERV EXP (C8 FCT, %)
Schedule R/E	No. Cust.													
	261,768													
Schedule G	131													
	261,899	88.432%	\$306.0		\$753.7	\$718.4		\$1,472.1	\$1,015.2		\$18.6		\$2,811.9	60.251%
	16,029													
	10,248													
Schedule J - DP	26,277	8.873%	\$30.7		\$75.6			\$75.6	\$101.9		\$1.9		\$210.1	4.502%
	5													
Schedule J - DS	126													
	130													
Schedule J - Pri	1													
	25													
Schedule J - Sec	26													
	6													
Schedule J - Nwk	150													
	156													
Schedule J - Sec	531													
	5,997													
Schedule J - Nwk	6,528													
	0													
Schedule J - Sec	24													
	24													
Schedule J - Sec	531													
	6,020													
Schedule J Total	6,551													
	537													
Schedule H/K	6,170	2.265%	\$7.8		\$19.3		\$1,502.2	\$1,521.5	\$26.0		\$0.5		\$1,555.8	33.336%
	6,707													
Schedule PS	157													
	376													
Schedule PP	533	0.180%	\$0.6		\$1.5			\$1.5	\$2.1		\$0.0		\$4.2	0.090%
	193													
Schedule PT	156	0.065%	\$0.2		\$0.6		\$43.2	\$43.8	\$0.7		\$0.0		\$44.7	0.958%
	4	0.053%	\$0.2		\$0.5		\$35.0	\$35.5	\$0.6		\$0.0		\$36.3	0.778%
Schedule F - Pri	353	0.001%	\$0.0		\$0.0		\$0.9	\$0.9	\$0.0		\$0.0		\$0.9	0.019%
	51													
Schedule F - Sec	314													
	365													
Schedule F - Total	76													
	0													
Schedule F - Total	76													
	314													
Schedule F - Total	390	0.132%	\$0.5		\$1.1			\$1.1	\$1.5		\$0.0		\$3.1	0.066%
	296,159	100.001%	\$346.0		\$852.3	\$718.4	\$1,581.3	\$3,152.0	\$1,148.0		\$21.0		\$4,667.0	100.000%
TOTAL														

¹ Allocation basis - % of customers (all rate classes).

² Allocation basis - 100% residential class. See e-mail from K. DeSilva dated 3/26/04.

³ Allocate to Schedules J, PS, PP, and PT.

INTEROFFICE CORRESPONDENCE



Hawaiian Electric Co., Inc.

June 12, 2008

To: Rob Pytlarz

From: Gary Fukumoto *GF*

Subject: HECO Rate Case Cost-of-Service Study
Installed Costs of Transformers by Rate Class
Installed Costs of Service Drop by Rate Class

Per your request, please find attached updated cost reports for the subject information along with supporting data. Please note that the costs indicated are based on current labor and material rates per HECO's SMU (Standard Material Unit) and Engineering Estimation System programs.

If you have any questions, please feel free to call either Eric Shimono (x7590), or myself (x7943). Thank you.

HAWAIIAN ELECTRIC COMPANY, INC.
DATA REQUIREMENTS FOR COST-OF-SERVICE STUDY
DOCKET NO. _____ TEST-YEAR-2009

Distribution Transformer Costs For Typical Customers
DATA PERIOD: 2004 2009

Rate Class	Service Voltage	Phase	KVA Size	Installed Cost Per Transformer (\$/Transformer)	Typical No. of Customers Per Transformer
Schedules R, E	Secondary	1-Phase	50	\$2,387 5,005	14
Schedule G	Secondary	1-Phase	50	\$8,387 5,005	5
		3-Phase	3-25	\$8,788 11,416	1
Schedule J	Secondary	1-Phase	50	\$2,387 5,005	1
		3-Phase	3-25	\$8,788 11,416	1
Schedule H	Secondary	1-Phase	50	\$8,387 5,005	5
		3-Phase	3-25	\$8,788 11,416	1
Schedule PS	Secondary	3-Phase	3-187	\$18,823 21,065	1
Schedule PP	Primary	3-Phase	N/A	N/A	1
Schedule PT	Transmission	3-Phase	N/A	N/A	1
Schedule F	Secondary	1-Phase	N/A	N/A	1
Schedule F	Primary	1-Phase	N/A	N/A	1

need data for Schedule J - Primary ← 3-Phase
Schedule PP -
Schedule F - Primary
Schedule F - Secondary

6/12/2008 Page 1 of 1

CID General Estimate Summary

Estimate ID: YPRPRATE1 Start Date: 06/01/2009 End Date: 06/01/2009
Description: Rate Case - Install 50kva 1phase OH TSF
Reference EGI: YPRPRATE1 Rev#: 1 D/C: C
Description: Rate Case - 50kva 1 Phase OH TSf Installation

Component Ln# / Description	SMU Labor	SMU Lbr On-Cost	Mtl	Mtl On-Cost	Outside Svcs	Non-SMU Labor	Non-SMU On-Cost
1 - Rate Case - 50kva 1 Phase OH Tsf Installation	383.05	628.81	2,685.29	429.65	0.00	0.00	0.00
Sub-totals:	383.05	628.81	2,685.29	429.65	0.00	0.00	0.00
Project Subtotal	4,126.80	Notes:					
Adjustments							
Police			0.00				
Police On-Cost			0.00				
Barricade Days			0.00				
Engineering			159.12				
Engineering On-Cost			493.46				
AFUDC			0.00				
Total Project Cost			4,779.38				
General Excise Tax (4.712)			225.20				
Customer's Cost			5,004.58				

Approved: _____

OH Credit Lump Sum 0.00
HECO Shr Comp. Ln

Eng. Est. - SMU Mtls & Labor Details

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Engineering Estimation System

SMU Labor & Material Details									
Estimate ID: YPRPRATE1				Type: General		WkGrp: HEDCID			
Est Desc: Rate Case - Install 50kva 1phase OH TSF						Start: 6/1/2009 End: 6/1/2009			
Component: 1 - Rate Case - 50kva 1 Phase									
Ln #	SMU Ref.	Stock #	Description	Quantity	Material \$	Crew Hrs	Crew Lbr\$	Supv Hrs	Supv Lbr\$
4	10-2040		1 PH TRANSFORMER SECONDARY LE	1.00	287.56	4.60	174.25	.19	7.41
5	10-2060		1PH TRANSFORMER CONNECTIONS-1	1.00	77.36	2.50	94.70	.10	3.90
6	10-2100		1 PH TRANSFORMER INSTALLATION	1.00		1.80	68.18	.08	3.12
7	12-1020-F2		NEUTRAL GROUNDING AERIAL CBL	1.00	49.26	.80	30.30	.03	1.17
8		0T0560050	TRANSFORMER, POLE MOUNT TWO B	1.00	2,271.11				
Detail Total					2,685.29	9.70	367.43	.40	15.60
Travel/Setup %:									
Contingency %:									
Component Total					2,685.29	9.70	367.43	.40	15.60
<input type="button" value="Update"/> <input type="button" value="Close"/>									

CID General Estimate Summary

Estimate ID: YPRPRATE2 Start Date: 06/01/2009 End Date: 06/01/2009
 Description: Rate Case - Install 3-25kva 1phase TSF
 Reference EGI: YPRPRATE2 Rev#: 0 D/C: C
 Description: Rate Case - 3-25kva 1 phase OH Tsf Installation

Component Ln# / Description	SMU Labor	SMU On-Cost	SMU Lbr On-Cost	Mtl On-Cost	Outside Svcs	Non-SMU Labor	Non-SMU On-Cost
1 - Rate Case - 3-25kva 1phase OH Tsf Installation	663.69	1,089.52	1,089.52	6,912.26	0.00	0.00	0.00
Sub-totals:	663.69	1,089.52	1,089.52	6,912.26	0.00	0.00	0.00
Project Subtotal	9,771.43	Notes:					
<u>Adjustments</u>							
Police	0.00						
Police On-Cost	0.00						
Barricade Days	0.00						
Engineering	275.71						
Engineering On-Cost	854.99						
AFUDC	0.00						
Total Project Cost	10,902.13						
General Excise Tax (4.712)	513.71						
Customer's Cost	11,415.84						

Approved: _____

OH Credit Lump Sum 0.00
 HECO Shr Comp. Ln

Eng. Est. - SMU Mtls & Labor Details

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Engineering Estimation System

SMU Labor & Material Details									
Estimate ID: YPRPRATE2 Type: General				WkGrp: HEDCID					
Est Desc: Rate Case - Install 3-25kva 1phase TSF				Start: 6/1/2009 End: 6/1/2009					
Component: 1 - Rate Case - 3-25kva 1phas									
Ln #	SMU Ref.	Stock #	Description	Quantity	Material \$	Crew Hrs	Crew Lbr\$	Supv Hrs	Supv Lbr\$
1	10-2121-1A		PREASSM "A" 3PH TSF BNK METAL	1.00	715.07	16.00	606.08	.67	26.14
2	12-1020-F2		NEUTRAL GROUNDING AERIAL CBL	1.00	49.26	.80	30.30	.03	1.17
3		000115543	CONDUCTOR, PARALLELED, 3-1/C,	70.00	1,075.20				
4		0T0560025	TRANSFORMER, POLE MOUNT TWO B	3.00	5,072.73				
Detail Total					6,912.26	16.80	636.38	.70	27.31
Travel/Setup %:									
Contingency %:									
Component Total					6,912.26	16.80	636.38	.70	27.31
					<input type="button" value="Update"/> <input type="button" value="Close"/>				

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CID General Estimate Summary

Estimate ID: YPRPRATE5 Start Date: 06/01/2009 End Date: 06/01/2009
Description: Rate Case - Install 3-167kva 1phase TSF
Reference EGI: YPRPRATE5 Rev#: 0 D/C: C
Description: Rate Case - 3-167kva 1 phase OH Tsf Installation

Component Ln# / Description	SMU Labor	SMU On-Cost	SMU Lbr On-Cost	Mtl On-Cost	Mtl	Outside Svcs	Non-SMU Labor	Non-SMU On-Cost
1 - Rate Case - 3-167kva 1phase OH Tsf Installation	544.98	894.65	894.65	2,448.32	15,302.00	0.00	0.00	0.00
Sub-totals:	544.98	894.65	894.65	2,448.32	15,302.00	0.00	0.00	0.00
Project Subtotal	19,189.95							
Adjustments								
Police	0.00							
Police On-Cost	0.00							
Barricade Days	0.00							
Engineering	226.12							
Engineering On-Cost	701.24							
AFUDC	0.00							
Total Project Cost	20,117.31							
General Excise Tax (4.712)	947.93							
Customer's Cost	21,065.24							

Approved: _____

OH Credit Lump Sum 0.00
HECO Shr Comp. Ln

Eng. Est. - SMU Mtls & Labor Details

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Engineering Estimation System

SMU Labor & Material Details									
Estimate ID: YPRPRATE5 Type: General				WkGrp: HEDCID					
Est Desc: Rate Case - Install 3-167kva 1phase TSF				Start: 6/1/2009 End: 6/1/2009					
Component: 1 - Rate Case - 3-167kva 1pha									
Ln #	SMU Ref.	Stock #	Description	Quantity	Material \$	Crew Hrs	Crew Lbr\$	Supv Hrs	Supv Lbr\$
1	10-1611		3PH TRANS BANK PLATFORM-HORI	1.00	597.81	1.00	37.88	.04	1.56
2	12-1020-F2		NEUTRAL GROUNDING AERIAL CBL	1.00	49.26	.80	30.30	.03	1.17
3		000114348	CONDUCTOR, PARALLELED, 3-1/C,	70.00	1,696.80				
4		0T0560167	TRANSFORMER, POLE MOUNT TWO B	3.00	9,295.26				
5	10-2150		PREASSEMBLED TRANSFORMER STRU	1.00	3,662.87	12.00	454.56	.50	19.51
Detail Total					15,302.00	13.80	522.74	.57	22.24
Travel/Setup %:									
Contingency %:									
Component Total					15,302.00	13.80	522.74	.57	22.24
<input type="button" value="Update"/> <input type="button" value="Close"/>									

revised 11-14-09
Es 11-14-09

HAWAIIAN ELECTRIC COMPANY, INC.
DATA REQUIREMENTS FOR COST-OF-SERVICE STUDY
DOCKET NO. _____ TEST-YEAR ~~2005~~

TYPICAL INSTALLED SERVICE DROP COSTS BY CUSTOMER CLASS
DATA PERIOD: ~~2004~~ 2009

Rate Class	Service Voltage	Phase	Service Drop Size (kw)	Typical Installed Cost Per Service Drop (\$/Service Drop)
Schedules R, E	Secondary	1-Phase	5	\$285 322
Schedule G	Secondary	1-Phase	10	\$288 322
		3-Phase	25	\$344 374
Schedule J	Secondary	1-Phase	50	\$393 490
		3-Phase	60	\$400 448
Schedule H	Secondary	1-Phase	10	\$285 322
		3-Phase	25	\$344 374
Schedule PS	Secondary	3-Phase	500	\$800 640
Schedule PP	Primary	3-Phase	440	\$1,000 1,281
Schedule PT	Transmission	3-Phase	6000	\$2,940 11,948
Schedule F	Secondary	1-Phase	1	\$150 159
Schedule F	Primary	1-Phase	60	\$971 1,126

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CID General Estimate Summary

Estimate ID: YPRPRATE6 Start Date: 06/01/2009 End Date: 06/01/2009
Description: Rate Case - Service Drop 1ph 120/240V (2-10kw)
Reference EGI: YPRPRATE6 Rev#: 0 D/C: C
Description: Rate Case - Service Drop 1ph 120/240V (2-10kw)

Component Ln# / Description	SMU Labor	SMU On-Cost	Mtl	Mtl On-Cost	Outside Syes	Non-SMU Labor	Non-SMU On-Cost
1 - Rate Case - Service Drop 1ph 120/240V (2-10kw)	63.34	103.98	28.80	4.61	0.00	0.00	0.00
Project Subtotal	200.73	Notes:					
<u>Adjustments</u>							
Police	0.00						
Police On-Cost	0.00						
Barricade Days	0.00						
Engineering	26.13						
Engineering On-Cost	81.03						
AFUDC	0.00						
Total Project Cost	307.89						
General Excise Tax (4.712)	14.51						
Customer's Cost	322.40						

Approved: _____

OH Credit Lump Sum 0.00
HECO Shr Comp. Ln

Eng. Est. - SMU Mtls & Labor Details

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Engineering Estimation System

SMU Labor & Material Details									
Estimate ID: YPRPRATE6 Type: General				WkGrp: HEDCID					
Est Desc: Rate Case - Service Drop 1ph 120/240V (2-10kw)				Start: 6/1/2009 End: 6/1/2009					
Component: 1 - Rate Case - Service Drop									
Ln #	SMU Ref.	Stock #	Description	Quantity	Material \$	Crew Hrs	Crew Lbr\$	Supv Hrs	Supv Lbr\$
1		000115105	CONDUCTOR, TPX, 2-1/C #4 AL,	60.00	28.80				
2		000107649	GRIP, DEADEND, AL, 20" FOR #4	1.00					
3		000107144	CLAMP, SPAN, AL, FOR MID SPAN	1.00					
4		000130260	CONNECTOR, TAP, COMPR, AL, RU	1.00					
5		000121483	SPLICE, SERVICE ENTRANCE, COM	1.00					
6		000101840	BOB SOLID, PORCELAIN, 5/8" DI	1.00					
7		000130229	CONNECTOR, TAP, COMPR, AL/CU,	4.00					
8		000124263	TAPE, ELECTRICAL, VINYL, BLAC	1.00					
9	01-2040-SC		STRING SERVICE CONDUCTOR, 1 S	1.00		1.60	60.61	.07	2.73
Detail Total					28.80	1.60	60.61	.07	2.73
Travel/Setup %:									
Contingency %:									
Component Total					28.80	1.60	60.61	.07	2.73
<input type="button" value="Update"/> <input type="button" value="Close"/>									

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CID General Estimate Summary

Estimate ID: YPRPRATE8 Start Date: 06/01/2009 End Date: 06/01/2009
Description: Rate Case - Service Drop 3ph (25kw)
Reference EGI: YPRPRATE8 Rev#: 0 D/C: C
Description: Rate Case - Service Drop 3ph (25kw)

Component Ln# / Description	SMU Labor	SMU On-Cost	Mtl On-Cost	Outside Svcs	Non-SMU Labor	Non-SMU On-Cost
1 - Rate Case - Service Drop 3ph (25kw)	63.34	103.98	69.20	0.00	0.00	0.00
Project Subtotal	63.34	103.98	69.20	0.00	0.00	0.00
Sub-totals:						
Notes:						
<u>Adjustments</u>						
Police	0.00					
Police On-Cost	0.00					
Barricade Days	0.00					
Engineering	26.13					
Engineering On-Cost	81.03					
AFUDC	2.57					
Total Project Cost	357.32					
General Excise Tax (4.712)	16.84					
Customer's Cost	374.16					

Approved: _____

OH Credit Lump Sum 0.00
HECO Shr Comp. Ln

Eng. Est. - SMU Mtls & Labor Details

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Engineering Estimation System

SMU Labor & Material Details									
Estimate ID: YPRPRATE8 Type: General				WkGrp: HEDCID					
Est Desc: Rate Case - Service Drop 3ph (25kw)				Start: 6/1/2009 End: 6/1/2009					
Component: 1 - Rate Case - Service Drop									
Ln #	SMU Ref.	Stock #	Description	Quantity	Material \$	Crew Hrs	Crew Lbr\$	Supv Hrs	Supv Lbr\$
1		000115220	CONDUCTOR, QUAD SERV DROP, CR	40.00	69.20				
2		000107821	GRIP, DEADEND, AL, 15" FOR 1/	2.00					
3		000122887	CONNECTOR, TAP, COMPR, AL, RU	8.00					
4		000101865	BOB, STRAIN PORC FOR 3/8" GUY	2.00					
5		000103127	BOLT, OVALEYE, GALV, 1/2" X 6	1.00					
6		000124263	TAPE, ELECTRICAL, VINYL, BLAC	1.00					
7	01-2040-SC		STRING SERVICE CONDUCTOR, 1 S	1.00		1.60	60.61	.07	2.73
Detail Total					69.20	1.60	60.61	.07	2.73
Travel/Setup %:									
Contingency %:									
Component Total					69.20	1.60	60.61	.07	2.73
<input type="button" value="Update"/> <input type="button" value="Close"/>									

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CID General Estimate Summary

Estimate ID: YPRPRATE7 Start Date: 06/01/2009 End Date: 06/01/2009
Description: Rate Case - Service Drop 1ph 120/240V(50kw)
Reference EGI: YPRPRATE7 Rev#: 0 D/C: C
Description: Rate Case - Service Drop 1ph 120/240V (50kw)

Component Ln# / Description	SMU Labor	SMU On-Cost	Mtl	Mtl On-Cost	Outside Svcs	Non-SMU Labor	Non-SMU On-Cost
1 - Rate Case - Service Drop 1ph 120/240V (50kw)	63.34	103.98	164.25	26.28	0.00	0.00	0.00
Sub-totals:	63.34	103.98	164.25	26.28	0.00	0.00	0.00
Project Subtotal	357.85						
Adjustments							
Police	0.00						
Police On-Cost	0.00						
Barricade Days	0.00						
Engineering	26.13						
Engineering On-Cost	81.03						
AFUDC	3.37						
Total Project Cost	468.38						
General Excise Tax (4.712)	22.07						
Customer's Cost	490.45						

Approved: _____

OH Credit Lump Sum 0.00
HECO Shr Comp. Ln

Eng. Est. - SMU Mtls & Labor Details

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Engineering Estimation System

SMU Labor & Material Details									
Estimate ID: YPRPRATE7 Type: General				WkGrp: HEDCID					
Est Desc: Rate Case - Service Drop 1ph 120/240V(50kw)				Start: 6/1/2009 End: 6/1/2009					
Component: 1 - Rate Case - Service Drop									
Ln #	SMU Ref.	Stock #	Description	Quantity	Material \$	Crew Hrs	Crew Lbr\$	Supv Hrs	Supv Lbr\$
1		000144402	CONDUCTOR, TRIPLEX, 600V, 2-1	75.00	164.25				
2		000107862	GRIP, DEADEND, AL, 3/4" FOR 3/	2.00					
3		000101865	BOB, STRAIN PORC FOR 3/8" GUY	2.00					
4		000121608	CONNECTOR, TAP, COMPR, AL, RU	6.00					
5		000124263	TAPE, ELECTRICAL, VINYL, BLAC	2.00					
6		000103127	BOLT, OVALEYE, GALV, 1/2" X 6	1.00					
9	01-2040-SC		STRING SERVICE CONDUCTOR, 1 S	1.00		1.60	60.61	.07	2.73
Detail Total					164.25	1.60	60.61	.07	2.73
Travel/Setup %:									
Contingency %:									
Component Total					164.25	1.60	60.61	.07	2.73
<input type="button" value="Update"/> <input type="button" value="Close"/>									

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CID General Estimate Summary

Estimate ID: YPRPRATE9 Start Date: 06/01/2009 End Date: 06/01/2009
Description: Rate Case - Service Drop 3ph 120/208V (60kw)
Reference EGI: YPRPRATE9 Rev#: 0 D/C: C
Description: Rate Case - Service Drop 3ph 120/208V (60kw)

Component Ln# / Description	SMU Labor	SMU On-Cost	Mtl	Mtl On-Cost	Outside Svcs	Non-SMU Labor	Non-SMU On-Cost
1 - Rate Case - Service Drop 3ph 120/208V (60kw)	63.34	103.98	129.75	20.76	0.00	0.00	0.00
Sub-totals:	63.34	103.98	129.75	20.76	0.00	0.00	0.00
Project Subtotal	317.83						
Adjustments							
Police	0.00						
Police On-Cost	0.00						
Barricade Days	0.00						
Engineering	26.13						
Engineering On-Cost	81.03						
AFUDC	3.08						
Total Project Cost	428.07						
General Excise Tax (4.712)	20.17						
Customer's Cost	448.24						

Approved: _____

OH Credit Lump Sum 0.00
HECO Shr Comp Ln

Eng. Est. - SMU Mtls & Labor Details

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Engineering Estimation System

SMU Labor & Material Details									
Estimate ID: YPRPRATE9 Type: General				WkGrp: HEDCID					
Est Desc: Rate Case - Service Drop 3ph 120/208V (60kw)				Start: 6/1/2009 End: 6/1/2009					
Component: 1 - Rate Case - Service Drop									
Ln #	SMU Ref.	Stock #	Description	Quantity	Material \$	Crew Hrs	Crew Lbr\$	Supv Hrs	Supv Lbr\$
1		000115220	CONDUCTOR, QUAD SERV DROP, CR	75.00	129.75				
2		000107862	GRIP, DEADEND, AL, 34" FOR 3/	2.00					
3		000101865	BOB, STRAIN PORC FOR 3/8" GUY	2.00					
4		000121608	CONNECTOR, TAP, COMPR, AL, RU	8.00					
5		000103127	BOLT, OVALEYE, GALV, 1/2" X 6	1.00					
6		000124263	TAPE, ELECTRICAL, VINYL, BLAC	1.00					
7	01-2040-SC		STRING SERVICE CONDUCTOR, 1 S	1.00		1.60	60.61	.07	2.73
Detail Total					129.75	1.60	60.61	.07	2.73
Travel/Setup %:									
Contingency %:									
Component Total					129.75	1.60	60.61	.07	2.73
<input type="button" value="Update"/> <input type="button" value="Close"/>									

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CID General Estimate Summary

Estimate ID: YPRPRATE13 Start Date: 06/01/2009 End Date: 06/01/2009
Description: Rate Case - Service Drop 3ph 277/480 (500kw)
Reference EGI: YPRPRATE13 Rev#: 0 D/C: C
Description: Rate Case - Service Drop 3ph 277/480V (500kw)

Component Ln# / Description		SMU Labor	SMU Lbr On-Cost	Mtl	Mtl On-Cost	Outside Svcs	Non-SMU Labor	Non-SMU On-Cost
1 - Rate Case - Service Drop 3ph 277/480V (500kw)		63.34	103.98	286.64	45.86	0.00	0.00	0.00
		63.34	103.98	286.64	45.86	0.00	0.00	0.00
Project Subtotal	499.82							
<u>Adjustments</u>								
Police	0.00							
Police On-Cost	0.00							
Barricade Days	0.00							
Engineering	26.13							
Engineering On-Cost	81.03							
AFUDC	4.39							
Total Project Cost	611.37							
General Excise Tax (4.712)	28.81							
Customer's Cost	640.18							

Approved: _____

OH Credit Lump Sum 0.00
HECO Shr Comp. Ln

Eng. Est. - SMU Mtls & Labor Details

Page 1 of 1

Engineering Estimation System

SMU Labor & Material Details									
Estimate ID: YPRPRATE13 Type: General				WkGrp: HEDCID					
Est Desc: Rate Case - Service Drop 3ph 277/480 (500kw)				Start: 6/1/2009 End: 6/1/2009					
Component: 1 - Rate Case - Service Drop									
Ln #	SMU Ref.	Stock #	Description	Quantity	Material \$	Crew Hrs	Crew Lbr\$	Supv Hrs	Supv Lbr\$
1		000115667	CONDUCTOR, AL, 336.4 MCM, POL	60.00	135.60				
2		000107904	GRIP, DEADEND, AL, 38", NEOPR	8.00	151.04				
3		000101865	BOB, STRAIN PORC FOR 3/8" GUY	8.00					
4		000124263	TAPE, ELECTRICAL, VINYL, BLAC	4.00					
5	01-2040-SC		STRING SERVICE CONDUCTOR, 1 S	1.00		1.60	60.61	.07	2.73
6		000120782	CONNECTOR, TAP, COMPR, AL 336	8.00					
Detail Total					286.64	1.60	60.61	.07	2.73
Travel/Setup %:									
Contingency %:									
Component Total					286.64	1.60	60.61	.07	2.73
<input type="button" value="Update"/> <input type="button" value="Close"/>									

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CID General Estimate Summary

Estimate ID: YPRPRATE12 Start Date: 06/01/2009 End Date: 06/01/2009
Description: Rate Case - Service Drop 3ph Primary 12.47kv (440 Rev#: 0 D/C: C
Reference EGI: YPRPRATE12
Description: Rate Case - Service Drop 3ph Primary 12.47kv (440kw)

Component Ln# / Description	SMU Labor	SMU On-Cost	Mtl On-Cost	Outside Svcs	Non-SMU Labor	Non-SMU On-Cost
1 - Rate Case - Service Drop 3ph Primary 12.47kv (440kw)	229.06	376.03	31.47	0.00	0.00	0.00
Sub-totals:	229.06	376.03	31.47	0.00	0.00	0.00
Project Subtotal	833.23					
<u>Adjustments</u>						
Police	0.00					
Police On-Cost	0.00					
Barricade Days	0.00					
Engineering	95.14					
Engineering On-Cost	295.04					
AFUDC	0.00					
Total Project Cost	1,223.41					
General Excise Tax (4.712)	57.65					
Customer's Cost	1,281.06					

Approved: _____

OH Credit Lump Sum 0.00
HECO Shr Comp. Ln

Eng. Est. - SMU Mtls & Labor Details

Page 1 of 1

Engineering Estimation System

SMU Labor & Material Details									
Estimate ID: YPRPRATE12 Type: General				WkGrp: HEDCID					
Est Desc: Rate Case - Service Drop 3ph Primary 12.47kv				Start: 6/1/2009 End: 6/1/2009					
Component: 1 - Rate Case - Service Drop									
Ln #	SMU Ref.	Stock #	Description	Quantity	Material \$	Crew Hrs	Crew Lbr\$	Supv Hrs	Supv Lbr\$
1		000115089	CONDUCTOR, BARE, AL, 1/0, SPE	40.00	120.40				
2	07-2430-51		STRAIN INSULATOR FOR PRIMARY	1.00	19.06	1.50	56.82	.06	2.34
3	05-1009-F3		PREASSM SEC AERIAL CBL DE CON	1.00		.70	26.52	.03	1.17
4	07-2210-51		PIN & INSUL FOR 3RD WIRE OF E	3.00	57.21	3.60	136.37	.15	5.85
Detail Total					196.67	5.80	219.71	.24	9.36
Travel/Setup %:									
Contingency %:									
Component Total					196.67	5.80	219.71	.24	9.36
<input type="button" value="Update"/> <input type="button" value="Close"/>									

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CID General Estimate Summary

Estimate ID: YPRPRATE11 Start Date: 06/01/2009 End Date: 06/01/2009
Description: Rate Case - Install Transmission (6000kw)
Reference EGI: YPRPRATE11 Rev#: 0 D/C: C
Description: Rate Case - Service Drop 3ph Transmission (6000kw)

Component Ln# / Description	SMU Labor	SMU Lbr On-Cost	Mtl On-Cost	Outside Svcs	Non-SMU Labor	Non-SMU On-Cost
1 - Rate Case - Service Drop 3ph Transmission (6000kw)	2,168.97	3,560.54	1,713.43	0.00	0.00	0.00
Sub-totals:	2,168.97	3,560.54	1,713.43	0.00	0.00	0.00
Project Subtotal	7,717.09					
<u>Adjustments</u>						
Police	0.00					
Police On-Cost	0.00					
Barricade Days	0.00					
Engineering	900.48					
Engineering On-Cost	2,792.49					
AFUDC	0.00					
Total Project Cost	11,410.06					
General Excise Tax (4.712)	537.64					
Customer's Cost	11,947.70					

Approved: _____

OH Credit Lump Sum 0.00
HECO Shr Comp. Ln

Eng. Est. - SMU Mtls & Labor Details

Page 1 of 1

Engineering Estimation System

SMU Labor & Material Details									
Estimate ID: YPRPRATE11 Type: General				WkGrp: HEDCID					
Est Desc: Rate Case - Install Transmission (6000kw)				Start: 6/1/2009 End: 6/1/2009					
Component: 1 - Rate Case - Service Drop									
Ln #	SMU Ref.	Stock #	Description	Quantity	Material \$	Crew Hrs	Crew Lbr\$	Supv Hrs	Supv Lbr\$
1		000115683	CONDUCTOR, BARE, AL, 336.4KCM	60.00	132.60				
2	08-1540		BUCK ARM RED TENSION SPAN LIN	1.00	1,348.05	45.00	1,704.60	1.88	73.36
3	08-1220-2C		VERT DE SUSP INS-46KV 336.4KC	1.00	232.78	9.90	375.01	.41	16.00
Detail Total					1,713.43	54.90	2,079.61	2.29	89.36
Travel/Setup %:									
Contingency %:									
Component Total					1,713.43	54.90	2,079.61	2.29	89.36
<input type="button" value="Update"/> <input type="button" value="Close"/>									

Basic Estimate Report

06/12/2008 Page 1 of 1

Estimate ID: YPRPRATE14A **Start Date:** 6/1/09 **End Date:** 6/1/09

Description: Rate Case - Service Drop 1ph 120V Street Light

Labor	34.64
Labor On-Cost	56.66
Material	1.28
Material On-Cost	0.20
Outside Services	0.00
Engineering	14.40
Engineering On-Cost	44.67
Less OH Line Credit	0.00
Subtotal	151.85
General Excise Tax	7.16
Customer's Cost	159.01

Approved: _____

Notes:

Eng. Est. - Non-Construction Entry

Page 1 of 1

Engineering Estimation System

Non-SMU Labor Details						
Estimate ID: YPRPRATE14		Type: General		WkGrp: HEDCID		
Est Desc: Rate Case - Service Drop 1ph 120V Street Ligh				Start: 6/1/2009 End: 6/1/2009		
Component: 1 - Rate Case - Service Drop						
RA Labor Desc	Hours	Description	Labor Cls	Rate	Total \$	Del
DH-LINEMAN THFTR	1.00	2man crew (1/2 each)	D_OHCREW	37.88	37.88	
	0			0.00	0.00	
<input type="button" value="Update"/> <input type="button" value="Close"/>						

6/12/2008 Page 1 of 1

CID General Estimate Summary

Estimate ID: YPRPRATE10 Start Date: 06/01/2009 End Date: 06/01/2009
Description: Rate Case - Service Drop 1ph Primary 7.2kv (60kw)
Reference EGI: YPRPRATE10 Rev#: 0 D/C: C
Description: Rate Case - Service Drop 1ph Primary 7.2kv (60kw)

Component Ln# / Description	SMU Labor	SMU On-Cost	Mtl On-Cost	Outside Svcs	Non-SMU Labor	Non-SMU On-Cost
1 - Rate Case - Service Drop 1ph Primary 7.2kv (60kw)	193.80	318.14	201.31	0.00	0.00	0.00
Sub-totals:	193.80	318.14	201.31	0.00	0.00	0.00
Project Subtotal	745.46					
<u>Adjustments</u>						
Police	0.00					
Police On-Cost	0.00					
Barricade Days	0.00					
Engineering	80.40					
Engineering On-Cost	249.33					
AFUDC	0.00					
Total Project Cost	1,075.19					
General Excise Tax (4.712)	50.66					
Customer's Cost	1,125.85					

Approved: _____

OH Credit Lump Sum 0.00
HECO Shr Comp. Ln

Eng. Est. - SMU Mtls & Labor Details

Page 1 of 1

Engineering Estimation System

SMU Labor & Material Details									
Estimate ID: YPRPRATE10			Type: General			WkGrp: HEDCID			
Est Desc: Rate Case - Service Drop 1ph Primary 7.2kv (6						Start: 6/1/2009 End: 6/1/2009			
Component: 1 - Rate Case - Service Drop									
Ln #	SMU Ref.	Stock #	Description	Quantity	Material \$	Crew Hrs	Crew Lbr\$	Supv Hrs	Supv Lbr\$
1		000115089	CONDUCTOR, BARE, AL, 1/0, SPE	20.00	60.20				
2	07-2210-51		PIN & INSUL FOR 3RD WIRE OF E	1.00	19.07	1.20	45.46	.05	1.95
3	05-1009-F3		PREASSM SEC AERIAL CBL DE CON	1.00		.70	26.52	.03	1.17
4	07-2050		AREA "C" FIGS 1 TO 9 1/C PRIM	1.00	122.04	3.00	113.64	.13	5.07
Detail Total					201.31	4.90	185.62	.21	8.19
Travel/Setup %:									
Contingency %:									
Component Total					201.31	4.90	185.62	.21	8.19
<input type="button" value="Update"/> <input type="button" value="Close"/>									

HAWAIIAN ELECTRIC COMPANY, INC.
DATA REQUIREMENTS FOR COST-OF-SERVICE STUDY
DOCKET NO. _____ TEST-YEAR 2009

TYPICAL INSTALLED METER COSTS BY CUSTOMER CLASS
DATA PERIOD: 06/20/2008

Rate Class	Service Voltage	Phase	METER TYPE	Typical Installed Cost Per Meter (\$/Meter)	TOU Installed Cost Per Meter (\$/Meter)
Schedules R, E, G, & H	Secondary	1-Phase (Self-contained Metering)	Non-Dmd	\$94.05	\$205.14
		3-Phase (Self-contained Metering)	Non-Dmd	\$216.67	\$237.18
Schedules R, E, G & H	Secondary	1-Phase (Transformer-rated Metering)	Non-Dmd	\$630.91	\$639.81
Schedule F & J	Secondary	1-Phase (Self-contained Metering)	Demand	\$197.30	\$237.18
		3-Phase (Self-contained Metering)	Demand	\$216.67	\$237.18
Schedule F & J	Secondary	1-Phase (Transformer-rated Metering)	Demand	\$630.91	\$639.81
		3-Phase (Transformer-rated Metering)	Demand	\$1,091.76	\$1,107.47
Schedule PS Schedule F, J & PP Schedule PT	Secondary Primary Trans	3-Phase (Transformer-rated Metering)	Demand	\$1,091.76	\$1,107.47
		3-Phase (Transformer-rated Metering)	Demand	\$5,580.17	\$5,610.54
		3-Phase (Transformer-rated Metering)	Demand	\$48,613.65	\$48,613.65
Schedule F & J	Primary	1-Phase (Transformer-rated Metering)		\$2,492.17	
Schedules F & J - Secondary Service, Weighted Meter Costs					
		1-Phase	29.664%	\$502.28	\$520.37
		3-Phase	70.336%	\$832.17	\$849.31

FACTORS RELATIVE TO ACCOUNT 902 (METER READING)

MANUAL READS

Rate	Time per Read (seconds)	Total Customer Count Dec-07	
R	30	258476	Standard read time (30 seconds)
E	30	2107	Standard read time (30 seconds)
G	35	25861	Standard read time (30 seconds) + 5 seconds for more difficult business access
H	35	699	Standard read time (30 seconds) + 5 seconds for more difficult business access
J	95	6697	Standard read time (30 seconds) + 5 seconds for difficult business access + 40 seconds for 4 additional read-displays
P	195	347	Standard read time (30 seconds) + 5 seconds to change demand seal + 120 seconds for difficult business access + 40 seconds for 4 additional read-displays
F	75	401	Standard read time (30 seconds) + 5 seconds to change demand seal + 40 seconds for 4 additional read-displays
U	235	3	Standard read time (30 seconds) + 5 seconds to change demand seal + 120 seconds for difficult business access + 80 seconds for 8 additional read-displays

MV90 REMOTE READS

Rate	Time per Read (seconds)	MV90 Count Dec-07	Total Customer Count Dec-07
J	90	237	6697
PS	90	127	188
PP	90	98	156
PT	90	3	3

ADJUSTED READ TIMES (wtd avg of manual and MV90 remote reads)

Rate	Time per Read (seconds)	Factor
R	30	1.00
E	30	1.00
G	35	1.17
H	35	1.17
J	95	3.16
PS	124	4.14
PP	129	4.30
PT	90	3.00
F	75	2.50
U	235	7.83

Account 902
2009 Meter Reading Factors Assumptions

Manual Reads

The manual read estimates were reviewed and verified by the Meter Reading Supervisor.

Reading and access time = 55% of total time.

Remaining 45% is for travel time and is spread evenly among rates according to the number of readings.

Reading and access times are based on the following:

To calculate the R and E meter Standard Read Time (which incorporates the time elapsed between reads and the time taken to enter the data into the handheld unit), read times were averaged from 43 different routes from throughout the Island, using both driving and walking routes to achieve a working average time of 30 seconds. All other rates are primarily business related, and have increasing amount of access time added due to the location of business meters, usually in locked rooms or cabinets (G, H), or past multiple locked doors, gates and security check points (P, F, U). For rates that use primarily demand meters (J, P and F) 5 seconds is added as the average time to change a demand seal. For rates that use meters that require meter readers to enter multiple reads, (J, P, F, U) time is added due to the 10 second scroll time per read,

MV90 Remote Reads

The MV90 remote read estimate was prepared by the Translation System Coordinator.

Rate classes J and P are adjusted for accounts read remotely by the MV90. Actual timing indicates an average of 90 seconds to connect to meter and complete download of data for these accounts. The increase in time to read MV90 accounts in 2009 compared to 2004 is due to the type of meters currently used and the frequency in downloading. Currently, data is being downloaded only once per month compared to once per week. This results in a greater amount of data to download.

Flexnet and AMR Reads

6,840 meters are read using two pilot technologies based on wireless communication. These meters are installed in Ewa, Aiea, Waikale, and Kahala and are read electronically using a drive-by system or the Flexnet wireless communication network system. These read methods are excluded from the meter reading factors.

2007 CUSTOMER COUNT BY RATE SCHEDULE

	January	February	March	April	May	June	July	August	September	October	November	December	Total
E	2,082	2,089	2,082	2,075	2,083	2,073	2,109	2,088	2,101	2,106	2,099	2,107	25,094
F	419	478	434	437	434	472	433	438	435	439	419	401	5,239
G	25,721	25,737	25,705	25,721	25,705	25,825	25,820	25,941	25,873	25,912	25,850	25,861	309,671
H	806	750	739	782	767	748	729	731	721	677	690	699	8,839
J	6,677	6,643	6,643	6,627	6,606	6,642	6,646	6,689	6,609	6,693	6,624	6,697	79,796
P	352	363	361	348	362	351	350	354	349	360	354	347	4,251
R	257,728	257,311	257,688	257,507	257,801	257,399	257,731	257,931	257,861	257,931	257,856	258,476	3,093,220
RT	-	-	-	-	-	-	-	-	-	-	-	-	-
U	5	4	4	4	4	4	4	4	4	4	4	3	48
	293,790	293,375	293,656	293,501	293,762	293,514	293,822	294,176	293,953	294,122	293,896	294,591	3,526,158

S:\CustomerService\Performance_Stats\CustAcctSvcs\CB-Billing\Revenues KWH Cust Count Stats.xls\Cust Count by Rate Sch 293,847

Cycle			METER		Interrogation CYCLE		Rates	
	01	21	3.80%		Every Day (00)	141	G	0
	15	1	0.18%		Every Monday (41)	10	GD	4
	51	49	8.86%		Every Friday (45)	2	G17	1
	52	14	2.53%		Every Saturday (46)	115	U3X	4
	53	29	5.24%					
	54	16	2.89%					
	55	2	0.36%		MODE			
	56	10	1.81%		Answer	515	J	182
	57	18	3.25%		Originate	5	J3	32
	58	9	1.63%		Manual Download	16	J4	4
	59	16	2.89%		No Connection	8	J5	5
	60	12	2.17%				J1	1
	61	16	2.89%				J1H	1
	62	15	2.71%		Meter Type		JK1	1
	63	6	1.08%				JK2	1
	64	35	6.33%		SENTINEL	144	J3H	1
	65	57	10.31%		ALPHA P	150		
	66	20	3.62%		MARKV	50	subtotal J	237
	67	72	13.02%		PH-3	59		
	68	31	5.61%		FULCRUM	9	OWD	1
	69	12	2.17%		QUAN	0	PS	113
	70	46	8.32%		DR-87	2	PT1	4
	71	46	8.32%		VECTRON	78	PP3	98
					ALPHA	33	PP4	0
					Q1000	17	PS5	14
							subtotal P	230
TOTAL NO. OF METERS	553	100.00%			TOTAL MTR	542	Total	467
TOTAL NO. OF ACCTS	473							
Trouble Meter	8							
Active Remote Interrogation	529							

Source: Trent Narimatsu, Translation Coord. Interim, MV90 HECO Account Summary Report.XLS

C:\Acct 902-Meter Reading allocations 2009_R.Pytlarz_6-9-08.xls]902

From: Leung, Edgar
Sent: Monday, June 09, 2008 2:39 PM
To: Iwamoto, Lea
Cc: Narimatsu, Trent
Subject: RE: P Customer Count - Dec 2007

My numbers are accounts that billed in December 2007. So...if a PT account is pended and didn't bill, then it won't be counted. Thanks!

Edgar Leung

ph. (808) 543-7273
fax (808) 203-1203

From: Iwamoto, Lea
Sent: Monday, June 09, 2008 2:34 PM
To: Leung, Edgar
Cc: Narimatsu, Trent
Subject: RE: P Customer Count - Dec 2007

Edgar.

Edgar,

There's a discrepancy. You have indicated below a total of 3 for PT but Trent has 4 on his list.
Please verify that data. Thanks

From: Leung, Edgar
Sent: Monday, June 09, 2008 2:00 PM
To: Iwamoto, Lea
Cc: Narimatsu, Trent
Subject: P Customer Count - Dec 2007

Hi Lea,

Here's the breakdown...

PP 156
PS 188
PT 3

Source: Rev 510-01

Thanks!

Edgar Leung

**Customer Service Analyst
Hawaiian Electric Co., Inc.
P.O. Box 2750
Honolulu, HI 96840-0001
ph. (808) 543-7273
fax (808) 203-1203**

Account #903 Customer Accounts Expense

Factors by Rate for Work Performed by Sections

Section	R	E	G	H	J	PS	PP	PT	F	U
CB	1.0	1.0	1.0	1.5	2.0	3.0	3.0	3.0	1.5	5.0
CD	1.0	1.0	2.0	2.0	3.0	3.0	3.0	3.0	0.5	0.0
CH	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0
CP	1.0	1.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
CF	1.0	1.0	2.0	1.0	2.7	2.7	2.7	2.7	1.0	0.0
CG	1.0	1.0	1.5	1.5	1.5	1.0	1.0	1.0	1.0	0.0
CM	1.0	1.0	1.0	1.0	0.0	0.5	0.5	0.5	1.0	0.0

C:\[Acct 903-Cust Acct Exp allocations 2009_R.Pytlarz_6-9-08.xls]Factors

Account #903 Customer Accounts Expense

Notes:

- CB Factors reflect the complexity of billing:
H = Connected load calculation (KW) requires field inspections of qualified equipment
J = Demand ratchet, power factor (KVAR), meter adjustment discount
P = Demand ratchet, power factor (KVAR), meter adjustment discount
F = Most are flat billing, manual calculation of KWH/KW using wattage information
U = Manual calculation, TOU periods
- CD A significant portion of CD work deals with commercial customers, so this is based on time to establish credit on new accounts, collect from delinquent customers, negotiate and monitor payment plans and prepare bad debt accounts for collection. Relative to R, the G rate has a much higher number of customers, but few need special payment arrangements so is weighted 2 times more than R. The H rate has fewer customers but the amount of time spent on these delinquent accounts is the same as G. The J and P rates are weighted 3 times more than R due to the increased time needed to negotiate and monitor payment plans and prepare bad debt and bankruptcies for filing. The F rate is .05 because very little work is necessary and we presently have one customer on the U rate so we weighted it 0.
- CH R, E = Setting up 2 customer records, one for customer and one for spouse. Deposit evaluation: check bad debt from previous account for potential maximum deposit, explain deposit, negotiate deposit payment.
G, H = Less time spent explaining deposit, but may need to explain personal guarantee
J = Obtain officer information, set up new customer record if mailing address different from service address
P, U = Call passed to Account Manager
F (street light) = Call passed to CID (Jackie Waltjen)
Volume of calls between Residential and Commercial rate classes can be represented by percentage of customer counts.
- CP R = 70% of customers mail in stub with payment, 21% ABP, 8% walk in, 1% don't mail stub with payment
G, H, J, P, F = EFT for federal, Verizon, Chevron, LDS (800 accounts); 20% don't mail in stub with payment or have multiple accounts. Manual processing of checks without bill stubs includes extraction and input by hand; manual processing of multiple accounts.
More automated for "singles" (1 stub, 1 check mailed in HECO return envelope)
- CF See Notes for Fld Svc
- CG See Notes for Fld Svc
- CM See Notes for Fld Svc

FACTORS BY RATE FOR WORK PERFORMED BY SECTION (903)

	R	E	G	H	J	P	F	U
CF	1.0	1.0	2.0	1.0	2.7	2.7	1.0	0.0
CG	1.0	1.0	1.5	1.5	1.5	1.0	1.0	0.0
CM	1.0	1.0	1.0	1.0	0.0	0.5	1.0	0.0

SECTION BREAKDOWN

CF

Director	1.0	1.0	2.0	2.0	2.0	2.0	1.0	0.0
Admin	1.0	1.0	2.0	0.5	3.0	3.0	1.0	0.0
Analyst	1.0	1.0	2.0	0.5	3.0	3.0	1.0	0.0

AVERAGE	1.0	1.0	2.0	1.0	2.7	2.7	1.0	0.0	Factor reflects billing complexity, customer complaints and contacts, and administrative functions.
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CG

Senior Inv	1.00	1.00	1.05	1.00	1.05	1.00	1.00	0.00
Field Service Rep	1.00	1.00	1.75	1.75	2.00	3.00	1.00	0.00
Clerk	1.00	1.00	1.25	1.00	1.00	1.00	1.00	0.00
Rev Pro Inv	1.00	1.00	2.00	2.00	2.00	0.00	1.00	0.00
Supervisor	1.00	1.00	1.50	1.50	1.50	0.00	1.00	0.00

AVERAGE	1.0	1.0	1.5	1.5	1.5	1.0	1.0	0.0	Factor reflects High Bill Inquiries, Re-Reads, Collections, Starts/Stops, Revenue Protection investigations, customer contact and supervisory functions.
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CM

Supervisor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0
Clerk	1.0	1.0	1.0	1.0	0.0	0.5	1.0	0.0

AVERAGE	1.0	1.0	1.0	1.0	0.0	0.5	1.0	0.0	Factor reflects customer service, complaint calls and set meter paperwork. Clerk does not handle J meter sets or customer complaints
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CUSTOMER ACCOUNTS BY DEPT. & (RA within CSD) 2009 TEST YEAR with GL codes (loadings)							CUST. ACCTS BY DEPT. & (RA within CSD) 2009 TEST YEAR less GL loadings			
Dept.	Acct	Acct Description	RA	Labor*	Includes GL LoadingsNon Labor	Total	Labor	N2,Non Labor less GI loadings; Uncollectible rev for Rev.@ current rates	Total less GI loadings	Labor % by RA to total acct.
CSD	901	Supv-Cust Acct	CA	\$176,938	\$241,297	\$418,235	\$176,938	\$172,913	\$349,851	100%
Info Tech	901	Supv-Cust Acct		\$0	\$1,528,794	\$1,528,794	\$0	\$1,528,794	\$1,528,794	0
GL codes					-\$289,351	-\$289,351				
				\$176,938	\$1,480,740	\$1,657,678	\$176,938	\$1,701,707	\$1,878,645	100%
CSD	902	Meter Read. Exp.	CB	\$23,898	\$43,744	\$67,642	\$23,898	\$30,600	\$54,498	0.792%
			CF	\$36,324	\$14,922	\$51,246	\$36,324	\$0	\$36,324	1.204%
			CG	\$517,684	\$377,313	\$894,997	\$517,684	\$102,812	\$620,496	17.166%
			CM	\$2,430,287	\$1,571,341	\$4,001,628	\$2,430,287	\$395,608	\$2,825,895	80.585%
			CS	\$7,622	\$3,394	\$11,016	\$7,622			0.253%
CSD total	902	Meter Read. Exp.		\$3,015,815	\$2,010,714	\$5,026,529	\$3,015,815	\$529,020	\$3,537,213	100.000%
CID	902	Meter Read. Exp.		\$0	\$0	\$0	\$0	\$0	\$0	
Info Tech	902	Meter Read. Exp.		\$0	\$45,876	\$45,876	\$0	\$45,876	\$45,876	0
GL codes					-\$1,527,877	-\$1,527,877				
Total	902	Meter Read. Exp.		\$3,015,815	\$528,713	\$3,544,528	\$3,015,815	\$574,896	\$3,583,089	100%
CSD total	903	Cust. Rec. Collec.	CA	\$153,700	\$3,111,354	\$3,265,054	\$153,700	\$3,035,872	\$3,189,572	3.13%
			CB	\$293,740	\$164,064	\$457,804	\$293,740	\$7,440	\$301,180	5.98%
			CD	\$229,991	\$274,051	\$504,042	\$229,991	\$152,150	\$382,141	4.69%
			CF	\$266,529	\$168,546	\$435,075	\$266,529	\$37,838	\$304,367	5.43%
			CG	\$666,043	\$492,067	\$1,158,110	\$666,043	\$143,726	\$809,769	13.57%
			CH	\$1,764,369	\$988,085	\$2,752,454	\$1,764,369	\$57,300	\$1,821,669	35.94%
			CM	\$52,098	\$28,001	\$80,099	\$52,098	\$0	\$52,098	1.06%
			CP	\$1,015,477	\$2,443,874	\$3,459,351	\$1,015,477	\$1,910,444	\$2,925,921	20.69%
			CS	\$386,178	\$200,402	\$586,580	\$386,178	\$20,400	\$406,578	7.87%
CSD total	903	Cust. Rec. Collec.		\$4,828,125	\$7,870,444	\$12,698,569	\$4,828,125	\$5,365,170	\$10,193,295	98.36%
Eng	903	Cust. Rec. Collec.		\$53,554	\$89,120	\$142,674	\$53,554	\$8	\$53,562	1.09%
Info Tech	903	Cust. Rec. Collec.		\$0	\$508,378	\$508,378	\$0	\$508,357	\$508,357	0.00%
Legal	903	Cust. Rec. Collec.		\$25,264	\$9,474	\$34,738	\$25,264	\$0	\$25,264	1%
Ed ConsAff	903	Cust. Rec. Collec.		\$1,843	\$843	\$2,686	\$1,843	\$0		
GL codes				\$0	-\$2,600,632	-\$2,600,632				
Total	903	Cust. Rec. Collec.		\$4,908,786	\$5,877,627	\$10,786,413	\$4,908,786	\$5,873,535	\$10,780,478	99.96%
CSD	904	Uncollectible	CD	\$0	\$1,093,596	\$1,093,596		\$1,283,514	\$1,283,514	
Cust Acct.		Grand Total		\$8,101,539	\$8,980,676	\$17,082,215	\$8,101,539	\$9,433,652	\$17,525,726	

Account 901 and CA's portion of account 903 can be spread by the percentage of customers in each rate class. This methodology may be used for the Departments outside of CSD.

Labor* Labor is comprised of exp. element 150 from the labor Cost Category & exp. element 421 from the Overhead Cost Category.

Source for data: May 15, 2008 Run Date E1 Rpt. NARUC Cust. Accts. 2009 Test Year Budget NonLbr incl. Idging
Non labor dollars adj. for GL codes by RA, Rept N2 (Direct Non-Lab. no loadings)
NonLbr Uncollectibles \$1,283,514 based on revenues @ current rates of \$1,785,137,000*0.0719%

Account 904 UNCOLLECTIBLE - by Rate Class

Revised: 7/22/2008

Test Year Total Uncollectible:

Rate Class	Description	% of Total
E	Employee	0.07%
R	Residential	69.86%
G	General Service Non-Demand	7.64%
H	Commercial Cooking, etc.	0.69%
J	General Service Demand	16.52%
PP	Large Power Primary	1.72%
PS	Large Power Secondary	3.48%
PT	Large Power Transmission	0.00%
F	Street Lighting	0.02%
U	Time-of-Use Service	0.00%
	Total	100.00%

2009 TY
Uncollectible
Expense
\$1,284,000

Uncollectible 5 Year Average

Rate Class	Description	2003	2004	2005	2006	2007	5-Yr Avg	% of Total
E	Employee	\$82	\$538	\$1,352	\$1,677	\$857	\$901	0.07%
R	Residential	\$827,442	\$850,722	\$715,184	\$1,060,703	\$880,433	\$866,897	69.86%
G	General Service Non-Demand	\$123,608	\$89,647	\$59,206	\$155,440	\$45,874	\$94,755	7.64%
H	Commercial Cooking, etc.	\$14,119	\$8,398	\$1,035	\$7,493	\$11,808	\$8,571	0.69%
J	General Service Demand	\$195,316	\$65,555	\$34,697	\$207,191	\$522,007	\$204,953	16.52%
PP	Large Power Primary	\$46,060	\$0	\$60,638	\$0	\$0	\$21,340	1.72%
PS	Large Power Secondary	\$182,353	\$0	\$0	\$0	\$33,789	\$43,228	3.48%
F	Street Lighting	\$0	\$1,265	\$0	\$0	\$0	\$253	0.02%
	Total	\$1,388,979	\$1,016,124	\$872,112	\$1,432,504	\$1,494,769	\$1,240,898	100.00%
	cross check - hide	\$1,388,979	\$1,016,235	\$872,112	\$1,433,744	\$1,494,769		
		\$0	-\$111	\$0	-\$1,241	\$0		

Source: % S:\CustomerService\CS Credit Division\CD\Credit Division Reports\APUA Reports\Annual APUA Report.xls

Notes (Unable to Identify Rate Class): 2004 excludes \$111 listed on Original 2004 Annual APUA Report; 2006 - excludes \$1,241 listed on the original 2006 Annual APUA Report.

Source: Dollars HECO -905 Uncollectible Expense based on Revenues @ Present Rates \$1,785,137.2 * 0.0719%, e-mail 6-5-08 P. Young via L.Okazaki.

C:\Acct_904_Uncollectible_allocations_R.Pytlarz_6-09-08.xls]5 yr avg 03-07

Information requested by Robert Pytlarz -- 6/24/08				
(Cost information for selected Divisions that fall under Customer Services Block)				
		910		911
		DSM	non-DSM	non-DSM
CTAD (SR)				
ESD	Labor	158,721.84	404,693.57	---
	Nonlabor	---	144,623.54	---
	Total	<u>158,721.84</u>	<u>549,317.11</u>	---
Marketing Services (SN)				
ESD	Labor	---	869,374.66	---
	Nonlabor	---	162,666.94	---
	Total	---	<u>1,032,041.60</u>	---
EC&A (PQC)				
ESD + Cons	Labor	---	453,329.95	---
App Air	Nonlabor	---	265,022.47	10,256.30
	Total	---	<u>718,352.42</u>	<u>10,256.30</u>
TOTAL FOR ALL		<u>158,721.84</u>	<u>2,299,711.13</u>	<u>10,256.30</u>

Account 910 Non DSM for C8 allocator

	L DSM Non	NL DSM Non	
909	393 <u><63></u> 330	34 <u><18></u> 16	427 <u><81></u> 346 ✓
910	2973 <u><317></u> <u><300></u> <u><0></u> 2356	2438 <u><1273></u> <u><158></u> <u><219></u> 796	5411 <u><1590></u> <u><450></u> } ✓ <u><219></u> 3152 ✓
911	32	1116	1148
912	<u>0</u>	<u>21</u>	<u>21</u>
Total ^{Non} DSM	2718	1949	4667 2340 7007

Determination of C8 Allocation factor

HAWAIIAN ELECTRIC COMPANY, INC.

NON DSM* CUSTOMER SERVICE EXPENSES

2003-2009

(\$1000s)

Line		A	B	C	D	E	F	G
		Recorded 2003	Recorded 2004	Recorded 2005	Recorded 2006	Recorded 2007	Budget 2008	Test Year 2009
909	Supervision							
1	Labor	0	103	229	216	235	256	312
2	Non-labor	0	7	17	17	22	(6)	34
3	Total	0	110	246	233	257	250	346
910	Customer Assistance							
4	Labor	2,438	2,213	2,168	2,083	2,309	2,251	2,356
5	Non-labor	497	762	767	529	429	623	796
6	Total	2,935	2,975	2,935	2,612	2,738	2,874	3,152
911	Informational Advertising							
7	Labor	15	15	25	11	17	29	32
8	Non-labor	55	477	554	188	632	171	1,116
9	Total	70	492	579	199	649	200	1,148
912	Miscellaneous Customer Services							
10	Labor	1	8	1	0	0	0	0
11	Non-labor	0	1	4	3	1	21	21
12	Total	1	9	5	3	1	21	21
	TOTAL CUSTOMER SERVICE EXPENSES							
13	Labor	2,454	2,339	2,423	2,310	2,561	2,536	2,700
14	Non-labor	552	1,247	1,342	737	1,084	809	1,967
15	Total	3,006	3,586	3,765	3,047	3,645	3,345	4,667

Amount excludes all DSM expenses

Reflects impact of GL Code Transfer (Excludes EE# 406, 422 & 423)

CA-IR-5

Please provide copies of the following documents for Hawaiian Electric Industries, Inc. ("HEI"), Hawaiian Electric Company, Inc. ("HECO"), and/or Maui Electric Company, Limited ("MECO"):

- a. 2007 Annual Report to Stockholders;
- b. 2007 Statistical Supplement to Annual Report;
- c. 2007 Form 10-K;
- d. Prospectus for most recent public offering of common stock;
- e. Prospectus for most recent public offering of long-term debt; and
- f. Prospectus for most recent public offering of preferred stock or hybrid securities.

HECO Response:

- a. See Attachment 1 of this response for HEI's 2007 Annual Report to Stockholders.
- b. See Attachment 2 of this response for HEI's 2007 Statistical Supplement to Annual Report.
- c. See Attachment 3 of this response for the 2007 Form 10-K for HEI and HECO.
- d. See pages 497 to 560 of HECO's revised response to CA-IR-5 in Docket No. 2006-0386 (HECO's 2007 Test Year Rate Case), filed April 23, 2007, for the Prospectus Supplement for HEI's most recent public offering of 2,000,000 shares of Common Stock.
- e. See pages 561 to 646 of HECO's revised response to CA-IR-5 in Docket No. 2006-0386, filed April 23, 2007, for the Prospectus for HEI's \$300,000,000 Medium-Term Notes, Series D and the Pricing Supplement No. 4 dated August 3, 2006; the Official Statement for \$140,000,000 Special Purpose Revenue Bonds, Series 2007A, and \$125,000,000 Special Purpose Revenue Bonds, Refunding Series 2007B issued for the benefit of Hawaiian Electric Company, Inc. and Subsidiaries.

- f. See pages 561 to 646 of HECO's revised response to CA-IR-5 in Docket No. 2006-0386, filed April 23, 2007, for the Prospectus for HECO's most recent public offering of Preferred Securities, Series 2004 QUIPS. HEI does not have any public offering of preferred stock or hybrid securities outstanding. However, HEI did have a hybrid security that was fully redeemed on April 16, 2004.

Attachments 1-3 are voluminous and available for inspection at HECO's Regulatory Affairs Division office, Suite 1301, Central Pacific Plaza, 220 South King Street, Honolulu, Hawaii. Please contact Dean Matsuura at 543-4622 to make arrangements to inspect the requested information. Electronic copies of the attachments are being provided.

CA-IR-6

Please provide copies of all reports prepared by rating agencies that describe HEI and/or HECO for the period 2007 to the present.

HECO Response:

See Attachment 1 of this response for rating agency reports that describe HECO.

See Attachment 2 of this response for rating agency reports that describe HEI.

Note: The information requested is copyrighted. The copies are being provided under the “fair use” exception to the copyright laws. Any copies made of the requested information are subject to the copyright laws.

Attachments 1 and 2 are voluminous and available for inspection at HECO's Regulatory Affairs Division office, Suite 1301, Central Pacific Plaza, 220 South King Street, Honolulu, Hawaii. Please contact Dean Matsuura at 543-4622 to make arrangements to inspect the requested information. Electronic copies of the attachments are being provided.

CA-IR-7

Please provide copies of all reports prepared by security analysts that describe HEI and/or HECO for the period 2007 to the present.

HECO Response:

See Attachment 1 of this response for reports prepared by security analysts in 2007.

See Attachment 2 of this response for reports prepared by security analysts in 2008.

Note: The information requested is copyrighted. The copies are being provided under the “fair use” exception to the copyright laws. Any copies made of the requested information are subject to the copyright laws.

Attachments 1 and 2 are voluminous and available for inspection at HECO's Regulatory Affairs Division office, Suite 1301, Central Pacific Plaza, 220 South King Street, Honolulu, Hawaii. Please contact Dean Matsuura at 543-4622 to make arrangements to inspect the requested information. Electronic copies of the attachments are being provided.

CA-IR-8

Please provide a schedule that shows the capital structures for HEI (consolidated), HECO (consolidated), HECO (Oahu only), MECO, and Hawaii Electric Light Company, Inc. ("HELCO") for the period 2003 – 2007 and for the test period in this proceeding.

HECO Response:

The 2003 and 2004 capital structures were provided in HECO's responses to CA-IRs 101, 492, 493, and 494 in Docket No. 04-0113, HECO's 2005 test year rate case. The 2005 capital structures were provided on page 3 of HELCO's response to CA-IR-207 in Docket No. 05-0315, HELCO's 2006 test year rate case (see Attachment 1 of this response). The 2006 capital structures were provided in HECO's response to CA-IR-8 in Docket No. 2006-0386, HECO's 2007 test year rate case, and in MECO's response to CA-IR-7 in Docket No. 2006-0387, MECO's 2007 test year rate case. The 2007 capital structures are provided in Attachment 2 of this response.

The 2008 forecast capital structure for HECO Consolidated is presented in the 2007 Statistical Supplement and Utility Forecast, which is provided in the response to CA-IR-5 as Attachment 2. The 2008 forecast capital structures for HECO (Oahu only) are privileged commercial and financial information which is maintained as non-public, confidential information. HECO will provide this information upon issuance of a protective order in this proceeding.

HECO objects to providing the 2008 forecast capital structures for MECO and HELCO, even under protective order, on the grounds that such information is not relevant to this docket. The financial information is privileged commercial and financial information, and the unprotected disclosure of the information could trigger broader release of the information.

HECO objects to providing the 2008 forecast capital structures for Hawaiian Electric Industries, Inc. (consolidated), even under protective order, on the grounds that:

(1) The requested information is privileged commercial and financial information, which is maintained by HEI and its subsidiaries as non-public, confidential information. (2) The disclosure of HEI forecast information from which income and earnings information (such as retained earnings) could be derived, could trigger requirements under the rules and guidelines of the Securities and Exchange Commission and/or the New York Stock Exchange that information that would be meaningful to an investor (such as earnings estimates) be released to all investors, if the information is disclosed beyond a limited number of “insiders”. Forecasts of earnings, etc. are the types of information that, if selectively released, could violate such requirements.

(3) Such information is not relevant to this docket. While HEI is the parent of HECO, the Commission generally has ruled that HEI, as a diversified holding company, is not an appropriate proxy for HECO or its utility subsidiaries in determining their cost of capital. (See Decision and Order No. 11317 in Docket No. 6531, HECO’s 1990 test year rate case, and Decision and Order No. 10993 in Docket No. 6432, HELCO’s 1990 test year rate case). (4) HECO is providing the forecast utility information that HECO and its subsidiaries are required to provide under the Commission’s rules. (The Commission’s rules specify where five-year utility forecasts are required.) In accordance with the Commission’s rules, the utilities provide the Commission and the Consumer Advocate with five-year capital expenditures budget reports which are due by January 1 of each year, pursuant to paragraph 2.3(g)(1) of General Order No. 7. On December 27, 2007, the Commission granted HECO and its subsidiaries an extension to file their capital expenditures reports no later than March 4, 2008, which was after the Form 10-K was filed. The most recent five-year capital expenditures budget was filed with the Commission

on February 29, 2008. HECO and its subsidiaries also provide five-year financing plans in financing dockets (unless the requirement is waived). See Exhibits 3-7 filed January 13, 2006 in Docket No. 05-0330 pursuant to Protective Order No. 22718 (January 12, 2006) for the most recent five-year financing plans filed with the Commission.

For Year Ended December 31, 2005

Capital Structure Ratios

Year ended December 31, 2005	HEI	HECO	HELCO	MECO
Short-term borrowings	5.6%	7.3%	13.2%	0.0%
Hybrids	0.0%	2.4%	2.7%	2.8%
Long-term debt	45.1%	36.0%	32.1%	40.7%
Preferred stock	1.4%	1.8%	1.9%	1.4%
Common equity	48.0%	52.5%	50.2%	55.0%
	100.0%	100.0%	100.0%	100.0%

Supporting Data for Capital Structure Ratios
(\$ in thousands)

Years ended December 31, 2005	HEI	HECO *	HELCO	MECO
Short-term borrowings	\$ 141,758	\$ 91,715	\$ 49,700	\$ -
Hybrids	0	30,000	10,000	10,000
Long-term debt	1,142,993	449,586	121,009	143,852
Preferred stock	34,293	22,293	7,000	5,000
Common equity	1,216,630	655,544	189,407	194,190
	\$ 2,535,674	\$ 1,249,138	\$ 377,116	\$ 353,042

* Note: HECO's hybrids and long-term debt excludes \$1,546K, which represents HECO's capital investment in HECO Capital Trust III. See HECO T-21, page 36, in Docket No. 04-0113.

Source: Hawaiian Electric Industries, Inc. Form 10-K for the fiscal year ended December 31, 2005, page 95 and Form 8-K dated March 7, 2006, page 33.

For Year Ended December 31, 2007

Capital Structure Ratios

Year ended December 31, 2007	HEI
Short-term borrowings--other than bank	3.5%
Hybrids	0.0%
Long-term debt--other than bank	47.0%
Preferred stock of subsidiaries	1.3%
Common equity	48.2%
	<u>100.0%</u>

Supporting Data for Capital Structure Ratios

(\$ in thousands)

Years ended December 31, 2007	HEI
Short-term borrowings--other than bank	\$91,780
Hybrids	0
Long-term debt--other than bank	1,242,099
Preferred stock of subsidiaries	34,293
Common equity	1,275,427
	<u>\$2,643,599</u>

Source: Hawaiian Electric Industries, Inc. Form 10-K for the fiscal year ended December 31, 2007, HEI Exhibit 13, page 58.

Year ended December 31, 2007	HECO	HELCO	MECO	RHI	UBC	HECO Consolidated
Short-term borrowings	2.3%	9.4%	0.0%	0.0%	0.0%	1.4%
Hybrids	2.3%	2.6%	2.6%	0.0%	0.0%	2.5%
Long-term debt	40.7%	34.7%	42.0%	0.0%	0.0%	40.5%
Preferred stock	1.7%	1.8%	1.3%	0.0%	0.0%	1.7%
Common equity	53.0%	51.6%	54.1%	100.0%	100.0%	53.9%
	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>

Supporting Data for Capital Structure Ratios

(\$ in thousands)

Years ended December 31, 2007	HECO	HELCO	MECO	RHI	UBC	HECO Consolidated
Short-term borrowings (1)	\$30,791	\$36,600	\$0	\$0	\$0	\$28,791
Hybrids (2)	30,000	10,000	10,000	0	0	51,546
Long-term debt (2)	536,111	135,811	161,631	0	0	833,553
Preferred stock	22,293	7,000	5,000	0	0	34,293
Common equity	699,551	201,820	208,521	182	388	1,110,462
	<u>\$1,318,746</u>	<u>\$391,231</u>	<u>\$385,152</u>	<u>\$182</u>	<u>\$388</u>	<u>\$2,058,645</u>

(1) HECO's short-term borrowings include amounts borrowed from MECO. HELCO's short-term borrowings represent amounts borrowed from HECO. These intercompany borrowings have been eliminated in the short-term borrowings amount for HECO Consolidated.

(2) HECO's (Oahu only) hybrids and long-term debt amounts exclude \$1,546,000, which represents HECO's capital investment in HECO Capital Trust III, however, the \$1,546,000 investment is reflected in the Hybrids for HECO Consolidated.

Source: Hawaiian Electric Company, Inc. Current Report on Form 8-K dated February 21, 2008, HECO Exhibit 99.1 page 38.

Capital Structure Ratios

Fcst Yr ended December 31, 2008

Short-Term Debt

Long-Term Debt

Hybrid Securities

Preferred Stock

Common Equity

HECO (Oahu only)

100.0%

Supporting Data for Capital Structure Ratios (\$ in thousands)

Fcst Yr ended December 31, 2008

Short-Term Debt

Long-Term Debt

Hybrid Securities *

Preferred Stock

Common Equity

HECO (Oahu only)

*

CA-IR-9

Please provide a schedule that shows the segment information for HEI for each year 2003 - 2007.

HECO Response:

The segment information for 2003 to 2005 is shown on Attachment 1 of this response, which is page 65 of HEI's 2005 Annual Report to Shareholders, Appendix A. The segment information for 2006 and 2007 is shown on Attachment 2 of this response, which is page 70 of HEI's 2007 Annual Report to Shareholders, Appendix A.

(in thousands)	Electric Utility	Bank	Other	Total
2005				
Revenues from external customers	\$1,806,198	\$ 387,910	\$ 21,456	\$2,215,564
Intersegment revenues (eliminations)	186	—	(186)	—
Revenues	1,806,384	387,910	21,270	2,215,564
Depreciation and amortization	131,350	10,065	746	142,161
Interest expense	49,408	121,426	25,901	196,735
Profit (loss)*	117,425	104,852	(20,933)	201,344
Income taxes (benefit)	44,623	39,969	(10,692)	73,900
Income (loss) from continuing operations	72,802	64,883	(10,241)	127,444
Capital expenditures	217,609	5,731	335	223,675
Assets (at December 31, 2005 **)	3,081,460	6,835,335	34,782	9,951,577
2004				
Revenues from external customers	\$1,550,671	\$ 364,284	\$ 9,102	\$1,924,057
Depreciation and amortization	123,700	17,044	781	141,525
Interest expense	49,588	112,787	27,588	189,963
Profit (loss)*	130,656	99,466	(29,903)	200,219
Income taxes (benefit)	49,479	58,404	(15,403)	92,480
Income (loss) from continuing operations	81,177	41,062	(14,500)	107,739
Capital expenditures	201,236	13,085	333	214,654
Assets (at December 31, 2004 **)	2,879,615	6,766,505	73,137	9,719,257
2003				
Revenues from external customers	\$1,396,683	\$ 371,320	\$ 13,313	\$1,781,316
Intersegment revenues (eliminations)	2	—	(2)	—
Revenues	1,396,685	371,320	13,311	1,781,316
Depreciation and amortization	118,792	30,748	859	150,399
Interest expense	44,341	123,324	24,951	192,616
Profit (loss)*	128,735	87,220	(33,540)	182,415
Income taxes (benefit)	49,824	30,959	(16,416)	64,367
Income (loss) from continuing operations	78,911	56,261	(17,124)	118,048
Capital expenditures	146,964	15,798	129	162,891
Assets (at December 31, 2003**)	2,687,798	6,515,208	104,694	9,307,700

* Income (loss) from continuing operations before income taxes.

** Includes net assets of discontinued operations.

Long-lived assets located in foreign countries as of the dates and for the periods identified above were not material.

Intercompany electric sales of the electric utilities to the bank and “other” segments are not eliminated because those segments would need to purchase electricity from another source if it were not provided by consolidated HECO, the profit on such sales is nominal and the elimination of electric sales revenues and expenses could distort segment operating income and net income.

Bank fees that ASB charges the electric utility and “other” segments are not eliminated because those segments would pay fees to another financial institution if they were to bank with another institution, the profit on such fees is nominal and the elimination of bank fee income and expenses could distort segment operating income and net income.

Segment financial information was as follows:

(in thousands)	Electric Utility	Bank	Other	Total
2007				
Revenues from external customers	\$2,106,096	\$ 425,495	\$ 4,827	\$2,536,418
Intersegment revenues (eliminations)	218	–	(218)	–
Revenues	2,106,314	425,495	4,609	2,536,418
Depreciation and amortization	145,311	13,574	874	159,759
Interest expense	53,268	159,898	25,288	238,454
Profit (loss)*	83,093	83,989	(36,025)	131,057
Income taxes (benefit)	30,937	30,882	(15,541)	46,278
Income (loss) from continuing operations	52,156	53,107	(20,484)	84,779
Capital expenditures	209,821	7,866	610	218,297
Assets (at December 31, 2007)	3,423,888	6,861,493	8,535	10,293,916
2006				
Revenues from external customers	\$2,054,616	\$ 408,365	\$ (2,077)	\$2,460,904
Intersegment revenues (eliminations)	274	–	(274)	–
Revenues	2,054,890	408,365	(2,351)	2,460,904
Depreciation and amortization	138,096	13,175	691	151,962
Interest expense	52,563	146,096	23,115	221,774
Profit (loss)*	121,387	88,558	(38,890)	171,055
Income taxes (benefit)	46,440	32,776	(16,162)	63,054
Income (loss) from continuing operations	74,947	55,782	(22,728)	108,001
Capital expenditures	195,072	14,927	530	210,529
Assets (at December 31, 2006 **)	3,063,134	6,808,499	19,576	9,891,209
2005				
Revenues from external customers	\$1,806,198	\$ 387,910	\$ 21,456	\$2,215,564
Intersegment revenues (eliminations)	186	–	(186)	–
Revenues	1,806,384	387,910	21,270	2,215,564
Depreciation and amortization	131,350	10,065	746	142,161
Interest expense	49,408	121,426	25,901	196,735
Profit (loss)*	117,425	104,852	(20,933)	201,344
Income taxes (benefit)	44,623	39,969	(10,692)	73,900
Income (loss) from continuing operations	72,802	64,883	(10,241)	127,444
Capital expenditures	217,609	5,731	335	223,675
Assets (at December 31, 2005 **)	3,081,460	6,835,335	34,782	9,951,577

* Income (loss) from continuing operations before income taxes.

** Includes net assets of discontinued operations.

Intercompany electric sales of the electric utilities to the bank and “other” segments are not eliminated because those segments would need to purchase electricity from another source if it were not provided by consolidated HECO, the profit on such sales is nominal and the elimination of electric sales revenues and expenses could distort segment operating income and net income.

Bank fees that ASB charges the electric utility and “other” segments are not eliminated because those segments would pay fees to another financial institution if they were to bank with another institution, the profit on such fees is nominal and the elimination of bank fee income and expenses could distort segment operating income and net income.

CA-IR-10

Please identify any methodological or data changes, except for the time frame of information contained in the capital structure and/or cost rates of fixed cost components, of HECO's current application.

HECO Response:

HECO's calculation of the capital structure and capital costs is consistent with the methodology HECO used in calculating the capital structure and capital costs in the HECO 2005 test year rate case (Docket No. 04-0113) which the Commission approved in Decision and Order No. 24171. However, in the HECO 2005 test year rate case, the issuance costs for the Syndicated Credit Facility ("SCF") were not included in the cost of capital calculation, since the SCF was not in effect for the 2005 Test Year. For HECO's 2007 test year rate case (Docket No. 2006-0386) and this current application, HECO is proposing to recover the unamortized SCF issuance cost through the cost of capital calculation for ratemaking. (See HECO's response to CA-IR-7 in Docket No. 2006-0360, filed October 20, 2006, for further discussion on the cost recovery of the unamortized issuance cost through the cost of capital calculation.)

In addition, for ratemaking purposes in the HECO 2007 test year rate case and this current application, the Company proposes to restore common equity for the accumulated other comprehensive income ("AOCI") adjustment related to the non-qualified pension plans. (See HECO T-20, page 60.)

In the 2007 test year rate case, the Consumer Advocate did not object to the proposed recovery of the unamortized SCF issuance cost through the cost of capital calculation or the restoration of common equity for the AOCI adjustment related to the non-qualified pension plans for ratemaking purposes.

In HECO's current application, the cost of short-term borrowings for the 2009 test year was based on the Blue Chip Financial Forecast for the three-month London Inter Bank Offered Rate ("LIBOR") plus 40 basis points, to reflect the typical spread between the three-month LIBOR rates and HECO's short-term borrowing rate. In contrast, in HECO's 2005 and 2007 test year rate cases, the short-term borrowing rate for the test year was based on the forecast for federal funds. The change from federal funds to LIBOR was due to indications from investment bankers that LIBOR is a better indicator of borrowing rates in the current market.

CA-IR-11

Please provide a schedule that shows the various security ratings of HEI and HECO for each year 2003 to the present.

HECO Response:

See Attachment 1 for available information on the ratings for HEI and HECO.

RATING HISTORY

8/20/2008

HAWAIIAN ELECTRIC COMPANY

S&P Corporate Credit Rating: BBB
(From BBB+ to BBB on 5/23/07)

Moody's Issuer Rating: Baa1

	S & P *		MOODY'S **	
	RATING	DATE	RATING	DATE
First mortgage bonds +	A-	10/14/97	A3	11/15/91
	BBB+	2/8/93	A2	11/13/90
	A-	11/16/90	A1	12/13/89
	A	11/30/87	Aa3	12/8/86
	A+	4/19/82	A1	4/26/82
	A	8/26/74	A	
Revenue bonds (insured) See Attachment 1, page 3	Various	2008	Various	2008
	AAA	1990	Aaa	1990
Revenue bonds (uninsured) +	BBB	5/23/2007	Baa1	11/15/91
	BBB+	5/17/1995	A3	11/13/90
	BBB	2/8/93	A2	12/13/89
	BBB+	11/16/90	A1	12/8/86
	A-	11/30/87	A2	4/26/82
	A	4/19/1982	A	
Medium term notes +	BBB+	5/17/1995	Baa1	12/22/1993
	BBB	11/24/1993		
Preferred stock	NR	1/15/99	Baa3	7/27/01
	BBB	2/8/93	baa2	12/10/98
	BBB+	11/16/90	baa1	11/15/91
	A-	11/30/87	a2	11/13/90
	A+	4/19/82	a1	12/13/89
	A	9/13/74	aa3	12/8/86
			a1	4/26/82
			a	
Commercial paper	A-2	11/16/90	P-2	11/15/91
	A-1	11/30/87	P-1	
	A-1+	2/10/84		
	A-1	8/19/77		
Preferred securities	BB+	5/23/2007	Baa2	7/27/01
	BBB-	2/22/99	baa1	3/24/1997
	BBB	2/27/1997		

* On 1/3/95, S & P's outlook for HEI, HECO, HELCO and MECO's securities was revised to stable from negative.
On 6/26/95, S & P's outlook for HEI, HECO, HELCO and MECO's securities was revised to positive from stable.
On 5/29/98, S & P's outlook for HEI, HECO, HELCO and MECO's securities was revised to stable from positive.
On 3/7/00, S & P's outlook for HEI, HECO, HELCO and MECO's securities was revised to negative from stable.
On 5/8/02, S & P's outlook for HEI, HECO, HELCO and MECO's securities was revised to stable from negative.
On 4/22/05, S & P's outlook for HEI, HECO, HELCO and MECO's securities was revised to negative from stable.
On 5/23/07, S & P's outlook for HEI, HECO, HELCO and MECO's securities was revised to stable from negative.

** On 4/26/82, Moody's refined its rating system and added numerical designations to the ratings.
On 6/19/01, Moody's outlook for HEI and HECO securities was revised to stable from negative.

+ There are no longer any first mortgage bonds, medium term notes or uninsured revenue bonds outstanding.

NOTE: Company pays for ratings from S&P and Moody's, thus chart only reflects ratings from S&P and Moody's.

RATING HISTORY

8/20/2008

HAWAIIAN ELECTRIC INDUSTRIES

S&P Corporate Credit Rating: BBB

	S & P *		MOODY'S **	
	RATING	DATE	RATING	DATE
Senior Unsecured	BBB	2/8/93	Baa2	11/15/91
	BBB+	11/16/90	Baa1	11/13/90
	A-	10/28/88	A3	7/26/90
			A1	11/8/88
Commercial paper	A-2	11/30/87	P-2	7/26/90
	A-1	2/6/85	P-1	
Preferred securities +	BB+	2/22/99	Ba1	7/27/01
	BBB-	12/30/96	baa3	1/10/97

* On 1/3/95, S & P's outlook for HEI, HECO, HELCO and MECO's securities was revised to stable from negative.
On 6/26/95, S & P's outlook for HEI, HECO, HELCO and MECO's securities was revised to positive from stable.
On 5/29/98, S & P's outlook for HEI, HECO, HELCO and MECO's securities was revised to stable from positive.
On 3/7/00, S & P's outlook for HEI, HECO, HELCO and MECO's securities was revised to negative from stable.
On 5/8/02, S & P's outlook for HEI, HECO, HELCO and MECO's securities was revised to stable from negative.
On 4/22/05, S & P's outlook for HEI, HECO, HELCO and MECO's securities was revised to negative from stable.
On 5/23/07, S & P's outlook for HEI, HECO, HELCO and MECO's securities was revised to stable from negative.

** On 4/26/82, Moody's refined its rating system and added numerical designations to the ratings.
On 6/19/01, Moody's outlook for HEI and HECO securities was revised to stable from negative.

+ There are no longer any preferred securities outstanding.

NOTE: Company pays for ratings from S&P and Moody's, thus chart only reflects ratings from S&P and Moody's.

Section from HECO's Financial Condition section of Form 10-Q for period ended June 30, 2008

As of August 1, 2008, the S&P and Moody's ratings of HECO securities were as follows:

	S&P	Moody's
Commercial paper	A-2	P-2
Revenue bonds (principal amount noted in parentheses, senior unsecured, insured as follows):		
Ambac Assurance Corporation (\$0.2 billion)	AA	Aa3
Financial Guaranty Insurance Company (\$0.3 billion)	BBB*	Baa1*
MBIA Insurance Corporation (\$0.3 billion)	AA	A2
XL Capital Assurance Inc. (\$0.1 billion)	BBB*	Baa1*
HECO-obligated preferred securities of trust subsidiary	BB+	Baa2
Cumulative preferred stock (selected series)	Not rated	Baa3

The above ratings reflect only the view of the applicable rating agency at the time the ratings are issued, from whom an explanation of the significance of such ratings may be obtained. Such ratings are not recommendations to buy, sell or hold any securities; such ratings may be subject to revision or withdrawal at any time by the rating agencies; and each rating should be evaluated independently of any other rating. HECO's overall S&P corporate credit rating is BBB/Stable/A-2.

* As a result of downgrades, Financial Guaranty Insurance Company's (FGIC's) and XL Capital Assurance Inc's (XLCA's) current financial strength ratings by S&P are BB and BBB-, respectively, and their insurance financial strength ratings by Moody's are B1 and B2, respectively. The revenue bonds insured by FGIC and XLCA referenced in the table above reflect a rating which corresponds to HECO's senior unsecured debt rating by S&P, and HECO's issuer rating by Moody's, because those ratings are higher than those of the applicable bond insurer.

Revenue bonds are issued by the Department of Budget and Finance of the State of Hawaii for the benefit of HECO and its subsidiaries, but the source of their repayment are the unsecured obligations of HECO and its subsidiaries under loan agreements and notes issued to the Department, including HECO's guarantees of its subsidiaries' obligations. The payment of principal and interest due on all revenue bonds currently outstanding are insured either by Ambac Assurance Corporation (Ambac), Financial Guaranty Insurance Company (FGIC), MBIA Insurance Corporation (MBIA) or XL Capital Assurance, Inc. (XLCA). The currently outstanding revenue bonds were initially issued with S&P and Moody's ratings of AAA and Aaa, respectively, based on the ratings at the time of issuance of the applicable bond insurer. In 2008, however, ratings of Ambac, MBIA, FGIC and XLCA were downgraded by S&P and Moody's resulting in a downgrade of the bond ratings of all of the bonds as shown in the table above. S&P and/or Moody's ratings of Ambac, FGIC, MBIA and XLCA are reported to be on watch and/or negative outlook.

CA-IR-12

Please provide copies of any presentations of HEI and HECO given to security analyses and rating agencies for the period 2007 to present.

HECO Response:

Presentations to Security Analysts

Although the portions of presentations on HEI and its non-utility subsidiaries are generally irrelevant to this proceeding, see Attachment 1 of this response for presentations made to the investment community from 2007 to present.

Presentations to Rating Agencies

HECO objects to providing the presentations by HEI and its subsidiaries to the rating agencies on the grounds that the presentations contain privileged commercial and financial information (including earnings forecast information), which is maintained by HEI, its subsidiaries and the rating agencies as non-public, confidential information, and on the grounds that those portions of the presentations related to HEI and its non-utility subsidiaries are irrelevant to the issues in this proceeding. HECO made this same objection in response to the Consumer Advocate's request for copies of rating agency presentations in HECO's 2007 test year rate case (see CA-IR-12 in Docket No. 2006-0386).

Notwithstanding this objection, the Company is providing the non-confidential portions of the May 2007 and May 2008 presentations to rating agencies relating to the utilities as Attachment 2 of this response. HECO objects to making available forecast earnings and forecast return information, as their disclosure might trigger disclosure requirements under rules and guidelines of the Securities and Exchange Commission and/or the New York Stock Exchange (see discussion in HECO's response to CA-IR-8). HECO objects to providing the forecast return for HELCO and MECO, even under protective order, on grounds that such information is not

relevant to this docket. Without waiving its objection, HECO will provide the forecast earnings and forecast return information in those presentations for HECO upon issuance of a protective order. HECO also objects to providing customer information contained in those presentations even under protective order due to privacy concerns.

In addition, information in presentations to rating agencies related to HEI and its non-utility subsidiaries is not relevant to the issues in this docket. While HEI is the parent of HECO, the Commission generally has ruled that HEI, as a diversified holding company, is not an appropriate proxy for HECO or its utility subsidiaries in determining their cost of capital. (See Decision and Order No. 11317 in Docket No. 6531 (HECO's 1990 test year rate case) and Decision and Order No. 10993 in Docket No. 6432 (HELCO's 1990 test year rate case).)

Attachment 1 is voluminous and available for inspection at HECO's Regulatory Affairs Division office, Suite 1301, Central Pacific Plaza, 220 South King Street, Honolulu, Hawaii. Please contact Dean Matsuura at 543-4622 to make arrangements to inspect the document. An electronic copy of the requested information is being provided.

Attachment 2 contains confidential information and will be provided after a Protective Order is issued in this proceeding.

Attachment 2 is voluminous and available for inspection at HECO's Regulatory Affairs Division office, Suite 1301, Central Pacific Plaza, 220 South King Street, Honolulu, Hawaii. Please contact Dean Matsuura at 543-4622 to make arrangements to inspect the document. An electronic copy of the requested information is being provided.

CA-IR-13

Please identify every public utility rate proceeding in which Dr. Morin has testified in since 2000 and provide the following information for each proceeding:

- a. Name of Company;
- b. Name of Jurisdiction;
- c. Docket Number;
- d. Date of Testimony;
- e. Cost of Equity Recommended; and
- f. Cost of Equity Authorized.

Dr. Morin's Response:

Because old testimonies are available in public records and/or on-line in the Lexis data base and/or on regulatory commission Web sites, Dr. Morin does not keep historical records of past testimonies in his archives in view of the public nature of such documents, nor does he rely on such information in his direct testimony. However, Dr. Morin reviewed a Regulatory Research Associates/SNL publication reviewing all utility cases over the 1990-2007 time period and Attachment 1 includes information from the article (including company name, state, docket number, dates and ROE recommended and awarded) for utility cases appearing in the publication in which Dr. Morin has participated. Attachment 2 includes information on additional cases in which Dr. Morin has participated in 2004, 2006 and 2007 that are not listed in Attachment 1. Dr. Morin notes that ROE recommendations are frequently updated prior to, or during, formal hearings. Dr. Morin also notes that several ROE awards are part of incentive mechanisms with substantial upside potential.

Company	State	Type of Service	Docket No	Increase Requested		Increase Authorized	
				Date	ROE	Date	ROE
Arkansas Western Gas	AR	GAS	04-176-U	12/29/2004	11.0	11/2/2005	9.7
San Diego Gas & Elec.	CA	EL	0212028 De-0412015	12/20/2002	-	12/8/2004	- *
San Diego Gas & Elec.	CA	GAS	0212028 De-0412015	12/20/2002	-	12/8/2004	- *
Delmarva Power & Light	DE	EL	05-304	9/1/2005	11.0	6/6/2006	10.0
Delmarva Power & Light	DE	GAS	06-284	8/31/2006	11.0	3/20/2007	10.25
City Gas Co. of Florida	FL	GAS	030569-GU	8/15/2003	11.25	2/9/2004	11.25
Atlanta Gas Light	GA	GAS	18638-U	5/25/2004	11.2	6/10/2005	10.9
MidAmerican Energy	IL	GAS	01-0696	10/19/2001	12.0	9/11/2002	11.2
MidAmerican Energy	IA	GAS	RPU-02-2	3/15/2002	12.6	11/8/2002	10.75
Duke Energy Kentucky	KY	GAS	2005-00042	2/25/2005	11.2	12/22/2005	10.2
Duke Energy Kentucky	KY	EL	2006-00172	5/31/2006	11.5	12/21/2006	-
Entergy Gulf States	LA	EL	U-25687	5/31/2001	11.1	1/8/2003	11.1
Entergy Gulf States	LA	GAS	U-28035	7/2/2004	11.25	7/6/2005	10.5
Entergy Louisiana	LA	EL	U-20925 (2004 RRF)	1/9/2004	11.4	5/18/2005	10.25
Entergy New Orleans	LA	GAS	UD-01-04	6/1/2001	12.25	5/15/2003	- *
Bangor Hydro - Electric	ME	EL	D-2006-661	1/16/2007	11.25	12/20/2007	10.2
Delmarva Power & Light	MD	EL	C-9093	11/17/2006	10.75	7/19/2007	10.0
Potomac Electric Power	MD	EL	C-9092	11/17/2006	10.75	7/19/2007	10.0
Detroit Edison	MI	EL	U-13808	6/20/2003	11.5	11/23/2004	11.0
Detroit Edison	MI	EL	U-14839	3/23/2006	11.25	8/31/2006	-
Minnesota Pwr. & Lt.	MN	EL	E-015-GR-94-1	1/3/1994	12.5	11/22/1994	11.6
Mississippi Power	MS	EL	01-UN-0548	8/3/2001	13.25	12/3/2001	12.88 *
Union Electric	MO	EL	EC-2002-1	7/2/2001	12.5	7/25/2002	-
Nevada Power	NV	EL	03-10001	10/1/2003	12.4	3/26/2004	10.25 *
Nevada Power	NV	EL	06-11022	11/15/2006	11.4 *	5/23/2007	10.7
Sierra Pacific Power	NV	EL	05-10003	10/3/2005	11.4	4/26/2006	10.6
Sierra Pacific Power	NV	GAS	05-10005	10/3/2005	11.4	4/26/2006	10.6
Pub. Service N. H.	NH	EL	DE-06-28	5/30/2006	10.5	5/25/2007	9.67
Public Service Elec. & Gas	NJ	EL	ER-02050303	5/24/2002	11.6	7/9/2003	9.75
Public Service Elec. & Gas	NJ	GAS	GR-05100845	9/30/2005	11.0	11/9/2006	10.0
Public Service New Mexico	NM	GAS	C-06-00210-UT	5/30/2006	11.0	6/29/2007	9.53
Orange & Rockland Utilities	NY	EL	C-06-E-1433	12/15/2006	-	10/18/2007	7.56
Duke Energy Ohio	OH	EL	05-59-EL-AIR	2/17/2005	11.0	12/21/2005	10.29
Chattanooga Gas	TN	GAS	06-00175	6/30/2006	11.5	11/25/2006	10.2
Entergy Gulf States	TX	EL	30123	8/24/2004	11.50	9/30/2004	-
Virginia Natural Gas	VA	GAS	PUE-2005-00057	7/1/2005	11.0	7/24/2006	-
Puget Sound Energy	WA	EL	UE-060266	2/15/2006	11.25	1/5/2007	10.4
Puget Sound Energy	WA	GAS	UG-060267	2/15/2006	11.25	1/5/2007	10.4
Cascade Natural Gas	WA	GAS	UG-060256	2/14/2006	11.15	1/12/2007	-

Source: Regulatory Research Associates, January 7, 2008, Major Rate Case Decisions --January 1990 - December 2007

* = The following from article footnotes:

San Diego Gas & Elec. - "Effective 9/30/04, the automatic adjustment mechanism was triggered, and SDG&E was authorized a 10.38% ROE...for the remainder of 2004 and for 2005. On 12/16/05, the PUC authorized the company a 10.7% ROE...for 2006, resetting the parameters utilized in the automatic adjustment mechanism. In 11/06, the PUC granted the company's request to extend the 2006 cost-of-capital authorizations through 2007. On 12/21/07, the PUC authorized the company an 11.1% ROE...for 2008."

Entergy New Orleans - The New Orleans City Council (NOCC) "adopted...a gas ARP that incorporated a 50-basis-point dead-band (11%-11.5%)...around an 11.25% ROE benchmark...On 9/27/05, the NOCC authorized an extension of ENO's electric and gas FRPs, until 9/1/07...ENO's gas FRP incorporates a 100-basis-point-dead-band (10.25%-11.25%) around a 10.75% ROE. All earnings above an 11.25% ROE are to flow to ratepayers, and ENO may recover 100% of the shortfall up to a 10.25% ROE."

Mississippi Power - "In 10/02, PSC adopted PEP-3. The benchmark ROE remained 11.75%. In 5/04, the PSC adopted PEP-4; the benchmark ROE, as of 9/30/04, was 10.7%. In 3/06, the PSC adopted the company's filing, which resulted in a \$32 million increase and incorporated a benchmark ROE of 10.54% as of 9/30/05. No rate change was implemented for 2007, based on a benchmark ROE of 11.22% as of 9/30/06."

Nevada Power - "On 9/21/04, the PUC approved the company's plan to purchase the uncompleted Moapa energy facility, and in approving the purchase authorized a 200-basis point ROE adder on the facility's construction costs." The company's request in D-06-11022 on 11/15/06 for an 11.4% ROE "(i)ncluded a 70-basis-point adder that was requested by the company in recognition of its higher risk as well as to "facilitate its achievement of investment grade status.""

<u>Company</u>	<u>State</u>	<u>Year</u>	<u>Docket No</u>	<u>Requested ROE</u>	<u>Authorized ROE</u>
ConEd NY	New York	2007	07--E-0523	11.5	9.1
Duke Energy Ohio	Ohio	2007	07-589-GA-AIR	11.0	10.7
Hawaiian Electric Co.	Hawaii	2006	2006-0386	11.25	
Hawaiian Electric Co.	Hawaii	2004	04-0113	11.25	10.7
Maui Electric Co.	Hawaii	2007	2006-0387	11.25	
Hawaii Electric Light Co.	Hawaii	2006	05-0315	11.25	
Sierra Pacific Power	Nevada	2007	ER07-1371-000	11.5	10.6

CA-IR-14

Please provide a copy of the source data used in deriving the “Allowed Risk Premiums”, as cited on pages 33-35.

Dr. Morin’s Response:

With reference to the Allowed ROE Risk Premium Analysis of Dr. Morin’s testimony pages 33-35, the annual allowed ROE data was taken from Regulatory Research Associates, Inc.’s (“Regulatory Focus”, Major Rate Case Decisions – April 2008) comprehensive survey of ROE decisions by regulators over the period 1999-2008 for electric utilities. The underlying data necessary for the analysis is shown below. The copyrighted document can be obtained from Regulatory Research Associates.

Number of Decisions	Year	ROE Elec	Bond Yield	Risk Premium
10	1998	11.66	5.58	6.08
20	1999	10.77	5.87	4.90
12	2000	11.43	5.94	5.49
18	2001	11.09	5.49	5.60
22	2002	11.16	5.42	5.74
22	2003	10.97	5.02	5.95
19	2004	10.75	5.05	5.70
29	2005	10.54	4.65	5.89
26	2006	10.36	4.88	5.48
39	2007	10.36	4.89	5.47

Source: Regulatory Research Associates, Inc. “Regulatory Focus”, Major Rate Case Decisions – April 2008

CA-IR-15

Please indicate if Dr. Morin is aware of any academic or other studies that maintain that all investors rely exclusively on analysts' forecasts of earnings per share in making investment decisions. Please cite any such studies that maintain this and indicate specifically where in the studies such a claim is made.

Dr. Morin's Response:

Extensive academic research in the past two decades has documented and confirmed repeatedly the overwhelming superiority of analysts' earnings forecasts over the uni-variate time-series forecasts. This latter category includes many *ad hoc* forecasts from statistical models, ranging from the naive methods of simple averages, moving averages, etc. to the sophisticated time-series techniques such as the Box-Jenkins modeling techniques.

In other words, this literature suggests that analysts' earnings forecasts incorporate all the public information available to the analysts and the public at the time the forecasts are released. Furthermore, these forecasts are statistically more accurate than forecasts solely based on historical earnings, dividends, book value equity, and the like.

This finding is based on researches on data from 1950s to 1980s. Important papers include Brown and Rozeff (1978), Cragg and Malkiel (1982), Harris (1986), Vander Weide and Carleton (1988), and Lys and Sohn (1990). The cited sources were consulted by Dr. Morin at the university library and are available from most university libraries. A summary of these papers follows.

Summary of Papers Reviewed

Lawrence D. Brown and Michael S. Rozeff, 1978, **The Superiority of Analyst Forecasts as Measures of Expectations: Evidence from Earnings**, *Journal of Finance*, Vol. XXXIII, No. 1, pp. 1 to 16

Using data (1951 to 1975) from 50 non-utility firms, the authors compared forecasting errors between forecasts reported in Value Line Investment Survey and forecasts from a sophisticated time-series methodology (Box-Jenkins). They concluded that “Value Line Investment Survey consistently makes significantly better earnings forecasts than the BJ [Box-Jenkins] and naive time series models.” (p.13)

J. Cragg and B. G. Malkiel, *Expectations and the Structure of Share Prices*, National Bureau of Economic Research, University of Chicago Press, 1982

See quotation below from Harris (1986).

Robert S. Harris, 1986, **Using Analysts’ Growth Forecasts to Estimate Shareholder Required Rates of Return**, *Financial Management*, Spring 1986, pp. 58 - 67

The main focus of this paper was to derive required return on equity using expected rather than historical earnings growth rates. Harris used IBES consensus earnings forecasts as a proxy for investor expectation. In his review of the literature on financial analysts’ forecasts (FAF), Harris wrote:

Moreover, a growing body of knowledge shows that analysts’ earnings forecasts are indeed reflected in stock prices. Such studies typically employ a consensus measure of FAF calculated as a simple average of forecasts by individual analysts. Elton, Gruber, and Gultekin show that stock prices react more to changes in analysts’ forecasts of earnings than they do to changes in earnings themselves, suggesting the usefulness of FAF as a surrogate for market expectations. In an extensive NBER study using analysts’ earnings forecasts, Cragg and Malkiel conclude “the expectations formed by Wall Street professionals get quickly and thoroughly impounded into the prices of securities. Implicitly, we have found that the evaluations of companies that analysts make are the sorts of ones on which market valuation is based.” (p.59, footnote omitted)

James H. Vander Weide and Willard T. Carleton, 1988, **Investor Growth Expectations: Analysts vs. History**, *The Journal of Portfolio Management*, Spring 1988, pp. 78 - 82

This paper updated the study by Cragg and Malkiel (1982), which suggests that the stock valuation process embodies analysts' forecasts rather than historically based growth figures such as the ten-year historical growth in dividends per share or the five-year growth in book value per share. (The Cragg and Malkiel study is based on data for the 1960s).

In this paper, the authors used data from 1971- 1983 for approximately sixty-five utility firms. They "found overwhelming evidence that the consensus analysts' forecasts of future growth is superior to historically oriented growth measures in predicting the firm's stock price." Their results "also are consistent with the hypothesis that investors use analysts' forecasts, rather than historically oriented growth calculations, in making stock buy-and-sell decisions." (p. 81)

Thomas Lys and Sungkyu Sohn, 1990, **The Association between Revisions of Financial Analysts' Earnings Forecasts and Security-Price Changes**, *Journal of Accounting and Economics*, vol. 13, pp. 341 - 363

Using virtually all publicly available analyst earnings forecasts for a sample of 58 companies in the 1980 - 86 period (over 23,000 individual forecasts by 100 analyst firms), the authors showed that stock returns responded to individual analyst earnings forecasts, even when they were closely preceded by earnings forecast made by other analysts or by corporate accounting disclosures.

Empirical studies have also been conducted showing that investors who rely primarily on data obtained from several large reputable investment research houses and security dealers obtain

better results than those who do not¹. Thus, both empirical research and common sense indicate that investors rely primarily on analysts' growth rate forecasts rather than on historical growth rates alone.

See attached reference list.

¹Examples of these studies include Stanley, Lewellen & Schlarbaum (1981) and Touche Ross Co. (1982).

Analyst Forecasts References

Brown, L.D. and Rozeff, M.S. "The Superiority of Analyst Forecasts as Measures of Expectations: Evidence from Earnings." *Journal of Finance*, March 1978, 1-16.

Cragg, J.G. and Malkiel, B.G. "Expectations and the Structure of Share Prices." National Bureau of Economic Research. Chicago: University of Chicago Press, 1982.

Cragg, J.G. and Malkiel, B.G. "The Consensus and Accuracy of Some Predictions of the Growth of Corporate Earnings." *Journal of Finance*, March 1968, 67-84.

Easterwood, J. C. and Nutt, S. R., "Inefficiency in Analysts' Earnings Forecasts: Systematic Misreaction or Systematic Optimism?" *Journal of Finance*, Vol. LIV, No. 5, 1999, pp. 1777-1797.

Elton, E.J., Gruber, M.J., and Gultekin, J. "Expectations and Share Prices." *Management Science*, September 1981, 975-981.

Fried, D. and Givoly, D., "Financial Analysts Forecasts of Earnings, A Better Surrogate for Market Expectations", *Journal of Accounting and Economics*, Vol. 4, 1982.

Harris, R. S., "Using Analysts' Growth Forecasts to Estimate Shareholder Required Rates of Return." *Financial Management*, Spring 1986, pp. 58 – 67.

Harris, R. S., and Marston, F. C., "The Market Risk Premium: Expectational Estimtaes Using Analysts' Forecasts," *Journal of Applied Finance*, 11:6-16, 2001.

Lys, T. and Sohn, S., "The Association between Revisions of Financial Analysts' Earnings Forecasts and Security-Price Changes," *Journal of Accounting and Economics*, vol. 13, 1990, pp. 341 – 363.

Moyer, R. C., Chatfield, R. E., and Kelley, G. D., "The Accuracy of Long-Term Earnings Forecasts in the Electric Utility Industry," *International Journal of Forecasting* Vol. I, 1985.

Stanley, L., Lewellen, W., and Schlarbaum, G. "Further Evidence on the Value of Professional Investment Research," *Journal of Financial Research*, Spring 1981, 1-9.

Timme, S.G. and Eiseman, P.C. "On the Use of Consensus Forecasts of Growth in the Constant Growth Model: The Case of Electric Utilities." *Financial Management*, Winter 1989, 23-35.

Touche Ross Co. "Proxy Disclosures and Stockholder Attitude Survey." Washington DC: National Association of Corporate Directors, May 1982.

Vander Weide, J.H. and Carleton, W. T. "Investor Growth Expectations: Analysts vs. History." *The Journal of Portfolio Management*, Spring 1988, 78-87.

CA-IR-16

RE: Statements on page 38, lines 17-25 and page 39, lines 1-2.

Please indicate if Dr. Morin is aware of any “evidence” that challenges the use of analysts’ forecasts of earnings as an indicator of stock price performance and/or cost of capital estimation.

Dr. Morin’s Response:

Some studies provide evidence that analysts make biased forecasts and misinterpret the impact of new information¹. For example, several studies in the early 1990s suggest that analysts either systematically under-react or over-react to new information. Easterwood & Nutt (1999) discriminate between these different reactions and reported that analysts under-react to negative information, but over-react to positive information. The recent studies do not necessarily contradict the earlier literature. The earlier research focused on whether analysts’ earnings forecasts are better at forecasting future earnings than historical averages, whereas the recent literature investigates whether the analysts’ earnings forecasts are unbiased estimates of future earnings. It is possible that even if the analysts’ forecasts are biased, they are still closer to future earnings than the historical averages, although this hypothesis has not been tested in the recent studies. One way to assess the concern that analysts’ forecasts may be biased upward is to incorporate into the analysis the growth forecasts of independent research firms, such as Value Line, in addition to the analyst consensus forecast. Unlike investment banking firms and stock brokerage firms, independent research firms such as Value Line have no incentive to distort earnings growth estimates in order to bolster interest in common stocks.

¹ Other relevant papers corroborating the superiority of analysts forecasts as predictors of future returns versus historical growth rates include: Fried & Givoly (1982), Moyer, Chatfield & Kelley (1985), and Gordon, Gordon & Gould (1989).

Some argue that analysts tend to forecast earnings growth rates that exceed those actually achieved and that this optimism biases the DCF results upward. The magnitude of the optimism bias for large rate-regulated companies in stable segments of an industry is likely to be very small. Empirically, the severity of the optimism problem is unclear for regulated utilities, if a problem exists at all. It is interesting to note that Value Line forecasts for utility companies made by independent analysts with no incentive for over- or understating growth forecasts are not materially different from those published by analysts in security firms with incentives not based on forecast accuracy, and may in fact be more robust. If the optimism problem exists at all, it can be circumvented by relying on multiple-stage DCF models that substitute long-term economic growth for analysts growth forecasts in the second and/or third stages of the model.

See reference list attached to response to CA-IR-15.

CA-IR-17

Please identify and provide copies of any analyses used by Dr. Morin in deriving the 0.25% risk adjustment he adds to the cost of equity for the average risk electric utility in order to develop a 11.25% cost of equity for HECO.

Dr. Morin's Response:

Dr. Morin adjusted the initial cost of equity estimate based on the industry average upward by 25 basis points, raising the cost of equity from 11.0% to 11.25%, in order to reflect the Company's relatively small size and the presence of debt-equivalent purchased power obligations.

Dr. Morin notes that the Commission has recognized the notion of higher relative risk on account of small size. For example, as reflected in Decision and Order No. 18365 in Docket No. 99-0207, the Commission agreed that a size adjustment is appropriate for HELCO on account of its smaller size, as demonstrated by its higher operating ratio, lower quality of earnings, and weak level of internally generated funds for construction. The Commission also expressed concern with the HELCO's substantial purchased power obligations.

An upward adjustment to the initial cost of common equity estimate based on an average risk electric utility is required to reflect the additional risk attributable to the company's weaker than average capital structure engendered by the debt-like purchased power contracts. Since the capital structure difference amounts to about 12%, that is, $56\% - 44\% = 12\%$, the required upward adjustment to the cost of equity ranges from 7.6 to 13.8 basis points times 12, which equals at least 90 basis points.

This amount is somewhat offset by the assumed continuation of the Company's current energy cost adjustment clause in the same manner as in the past, which Dr. Morin discussed in his direct testimony.

One can also examine utility bond yield spreads as a guide for the proper risk adjustment. Dr. Morin notes that at the time of preparing his testimony, yield spreads between A-rated and BBB-rated bonds were approximately 40 basis points.

A third framework to quantify the risk differential is based on the CAPM. Given the observed range in the betas of electric utilities, it is reasonable to state that on account of its small size and purchased power burden relative to other electric utilities, the Company's beta factor increases by 0.05. The CAPM formula can then be used to approximate the return (cost of equity) differences implied by the increase in beta. The basic form of the CAPM states that the return differential is given by the differential in beta times the excess return on the market, $(R_M - R_F)$. The return differential implied by an increase in beta of 0.05 is given by 0.05 times the market risk premium $(R_M - R_F)$. Using an estimate of 7% for $(R_M - R_F)$, the return adjustment is 35 basis points.

Based on all these considerations and various frameworks, a conservative increase of 25 basis points is not unreasonable in Dr. Morin's view.

CA-IR-18

Please identify the annual revenue impact for HECO's ratepayers associated with of Dr. Morin's proposed flotation cost adjustment.

Dr. Morin's Response:

The annual impact on revenue requirement can be gauged by multiplying the common equity balance by 0.003 (30 basis points), dividing by $(1-T_1)$, where T_1 is the effective income tax rate, and then by dividing by $(1-T_2)$, where T_2 is the composite revenue tax rate.

CA-IR-19

Please provide copies of all S&P and Moody's articles cited in footnotes that are not already included in exhibits.

HECO Response:

The S&P article, "Key Credit Factors: Assessing U.S. Vertically Integrated Utilities' Business Risk Drivers" dated September 14, 2006, was filed as HECO-1908 in Docket No. 2006-0386 (HECO 2007 test year rate case). See also Attachment 1 of this response.

The S&P article, "Buy versus Build: Debt Aspects of Purchased-Power Agreements" dated May 8, 2003, was filed as HECO-2111 in Docket No. 04-0113 (HECO 2005 test year rate case). See also Attachment 2 of this response.

The S&P article, "Request for Comments: Imputing Debt to Purchased Power Obligations" dated November 1, 2006, was filed as HECO-1915 in Docket No. 2006-0386. See also Attachment 3 of this response.

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RESEARCH

Key Credit Factors:

Assessing U.S. Vertically Integrated Utilities' Business Risk Drivers

Publication date: 14-Sep-2006
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The methodology that Standard & Poor's Ratings Services uses to rate vertically integrated electric, gas, and combination investor-owned utilities in the U.S. is based on the same precepts that we have used for many years, though the emphasis has changed as the utility industry has evolved. The fundamental methodology encompasses two basic components--business risk and financial risk--and their relationship. Where a utility presents a strong business risk profile, the financial profile can be less robust for any given rating. Likewise, where a utility's business risk profile is weaker, its financial performance must be stronger for any given rating. For combination utilities, the gas operations may have a stabilizing influence on credit quality, but since the electric business is typically significantly larger, it is the major credit driver. (For details on Standard & Poor's analytical approach to gas utilities, see "Key Credit Factors For Natural Gas Distributors" published Feb. 28, 2006.)

Often, an integrated utility is a part of a larger holding company structure that also owns other businesses, frequently unregulated electricity generation. This fact does not alter how we analyze the utility, but it may affect the ultimate rating outcome due to any credit drag that the unregulated activities may have on the utility. Such considerations include the freedom and practice of management with respect to shifting cash resources among subsidiaries and the presence of ring-fencing mechanisms that may protect the utility.

Five Factors Determine The Business Profile

Five basic characteristics define a vertically integrated utility's business profile:

- Regulation,
- Markets,
- Operations,
- Competitiveness, and
- Management.

Standard & Poor's is most concerned about how these elements contribute individually and in aggregate to the predictability and sustainability of financial performance, particularly cash flow generation relative to fixed obligations. While considerable attention has focused in recent years on companies in states that deregulated in the late 1990s and the early part of this decade and the related credit consequences of disaggregation and nonregulated generation, 27 states (plus four that formally reversed, suspended, or delayed restructuring) have retained the traditional regulated model. For utilities operating in those states, the quality of regulation and management loom considerably larger than markets, operations, and competitiveness in shaping overall financial performance. Policies and practices among state and federal regulatory bodies will be key credit determinants. Likewise, the quality of management, defined by its posture towards creditworthiness, strategic decisions, execution and consistency, and its ability to sustain a good working relationship with regulators, will be key. Importantly, however, it is virtually impossible to completely segregate each of these characteristics from the others; to some extent they are all interrelated.

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[17000P-2000] Key Credit Factors: Assessing the Financially Integrated Utility Business Profile

On Standard & Poor's business profile scale (where '1' is excellent and '10' is vulnerable), vertically integrated utilities generally have satisfactory business profiles of '5' or '6'. (See tables 1 and 2 in the Appendix below for business profile benchmarks plus a list of utilities we rate and their business profile scores.) We view a company that owns regulated generation, transmission, and distribution operations, as positioned between companies with relatively low-risk transmission and distribution operations and companies with higher-risk diversified activities on the business profile spectrum. What typically distinguishes one vertically integrated utility's business profile score from another is the quality of regulation and management.

Regulation

Regulation is a critical aspect that underlies integrated utilities' creditworthiness. Decisions by state public service commissions can profoundly affect financial performance. Standard & Poor's assessment of the regulatory environments in which a utility operates is guided by certain principles, most prominently consistency and predictability, as well as efficiency and timeliness. For a regulatory scheme to be considered supportive of credit quality, commissions must limit uncertainty in the recovery of a utility's investment. They must also eliminate, or at least greatly reduce, the issue of rate-case lag, especially when a utility engages in a sizable capital expenditure program and incurs substantial deferrals of fuel costs.

Standard & Poor's evaluation encompasses the administrative, judicial, and legislative processes involved in state and federal regulation, and includes the political environment in which commissions render decisions. Regulation is assessed in terms of its ability to satisfy the particular needs of individual utilities. Rate-setting actions are reviewed case-by-case with regard to the potential effect on credit quality. As frequently postulated in prior years, our evaluation of regulation focuses on the willingness and ability of regulation to provide cash flow and earnings quality adequate to meet investment needs, earnings stability through timely recognition of volatile cost components such as fuel and satisfactory returns on invested capital and equity. Regulators' authorization of high rates of return is of little value unless returns are realistic and achievable. Allowing high returns based on noncash items does not benefit bondholders. A regulatory jurisdiction that permits incentives whereby utilities are allowed to earn a return based on their ability to sustain rates at competitive levels is viewed favorably. In addition to performance-based rewards or penalties, flexible plans could include market-based rates, price caps, index-based prices, and rates premised on the value of customer service. Also important is the ability to enter into long-term arrangements at negotiated rates without having to seek regulatory approval for each contract.

Because the bulk of a utility's operating expenses relate to fuel and purchased power, of primary importance to rating stability is the level of support that state regulators provide to utilities for fuel cost recovery, particularly as gas and coal costs have risen. Utilities that are operating under rate moratoriums, or without access to fuel and purchased-power adjustment clauses or with fixed-fuel mechanisms, or face significant regulatory lag, also are subject to reduced operating margins, increased cash flow volatility, and greater demand for working capital. Companies that are granted fuel true-ups may be required to spread recovery over many years to ease the pain for the consumer. Standard & Poor's notes that fuel-adjustment mechanisms have become more common in the industry, but not all are created equal. While some jurisdictions permit recovery on a dollar-for-dollar basis over a defined time period, certain jurisdictions, such as Washington State, impose a deadband in which the company absorbs all the risk and rewards of fuel costs above and below the established recovery rate. Beyond the deadband there is a sharing of risks and rewards with ratepayers. In Arizona, Arizona Public Service Co. has a 90/10 sharing mechanism between the company and ratepayers, respectively, for all costs passed through the power supply adjuster. The mechanism is triggered based on a date (once a year in February 2006) and not on a threshold level of deferrals. The annual adjustment is also subject to a lifetime cap of 4 mils per kilowatt-hour, which has led to power deferrals.

In addition to fuel cost recovery filings, regulators will have to address significant rate increase requests related to new generating capacity additions, environmental modifications, and reliability upgrades. Current cash recovery and/or return by means of construction work in progress support what would otherwise be a sometimes significant cash flow drain and reduces the utility's need to issue debt during construction.

Moreover, allowing rate recovery of projected costs with subsequent periodic updates for actual results reduces lags in rate recovery. Also supportive of credit quality is the ability of the utility, commission staff,

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[17000-2000] Key Credit Factors: Assessing the Utility's Integrated Service Environment

consumer advocates, and other major interveners to reach a comprehensive settlement before construction of new base load capacity. Certain states, such as Indiana, Texas, Kansas, and Minnesota, have adopted environmental tracking mechanisms and other riders that allow companies to reflect in rates capital costs associated with environmental compliance equipment without having to file a formal rate case. Creditworthiness can also be enhanced when a company has the authority to timely recover unanticipated costs, such as those incurred for repairing storm damage, as in Florida. While the Alabama Public Service Commission does not currently employ a separate storm repair cost recovery mechanism to ensure rapid recovery of storm repair costs, it has shown a willingness to work with utilities to help them recover at least some of these costs on a timely basis and to start replenishing storm reserves. Finally, the greater the percentage of a utility's rates that are recovered through fixed charges rather than volume-based charges, the greater the support for credit quality.

For utilities that own a natural gas business, automatic and timely pass-through of commodity costs provides the strongest level of credit support. Lesser clauses, including mechanisms that require after-the-fact sign-off by regulators, introduce the potential for disallowance if the regulator deems gas to be purchased at imprudent cost levels.

Due to the extreme volatility and high gas prices over the past few heating seasons, more regulators have revised gas adjustment clauses to provide monthly gas adjustments rather than awaiting the end of the heating season to begin reimbursement. This expedited treatment helps the utility to reduce any regulatory lag to recover costs and streamlines working capital needs, which in turn should allow the firm to modestly temper rising gas bills to their customers.

Both regulators and natural gas companies are increasing customer-education programs on energy efficiency and conservation. Lawmakers, state regulators, and companies are in preliminary discussions to potentially restructure the current rate structures to encourage these goals of energy conservation and efficiency without hurting the company's bottom line and still allow utilities to achieve their approved regulated rate of return. In essence, "conservation tariffs" would aim to decouple earnings and rates of return from delivered volumes and should eliminate a current major disincentive for utilities to develop such conservation programs. This would also better align the interest of consumers with utility shareholders by implementing innovative rate designs that would encourage energy conservation and efficiency.

Key success factors include:

- Alternative ratemaking/flexibility,
- Attention to credit quality,
- Timely and consistent rate treatment,
- Support for fuel cost recovery,
- Support for a reasonable cash return on investment, and
- Support for rapid return on investment.

Markets

Assessing market dynamics begins with an economic and demographic evaluation of the service area in which a utility operates. Strength of long-term demand for energy is examined from a macroeconomic perspective, which enables Standard & Poor's to measure the affordability of rates and the staying power of demand. Distribution by classification according to total number of customers, revenues, and margins is closely scrutinized to assess the depth and diversity of the utility's customer mix. For example, heavy industrial concentration is viewed with some caution because the utility may be exposed to cyclical volatility and face competitive alternatives. A large residential component, on the other hand, produces a more stable and predictable revenue stream. The utility's largest customers are identified to determine their stability and importance to the bottom line because the loss of one large customer could adversely affect the utility's financial position. Moreover, large customers may turn to self-generation, potentially leading to less financial protection for the utility.

Standard & Poor's also analyzes any long-term consumption trends and the reasons behind them. Factors addressed include the market's size and growth rate, the franchise's strength, historical and projected growth rates, income levels and trends in population, employment, and per capita income. A utility with a

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healthy economy and customer base, as illustrated by diverse employment opportunities, average or above-average wealth and income statistics, and low unemployment, will be better able to support its operations.

For the gas business, Standard & Poor's also examines customer saturation. Firms that operate in service areas with low growth potential still can expand at healthy rates if a relatively low level of customer saturation permeates the service territory. For example, customers who convert to natural gas from other fuel sources (such as oil) provide growth opportunities to companies operating in low population growth service areas.

Despite the review of market characteristics, they are clearly a secondary consideration to regulation. In Nevada, for years the country's fastest growing state, Nevada Power Co. and Sierra Pacific Power Co. struggled to recover capital expenditures on a timely basis, and were accordingly rated as low investment-grade credits. In Florida, which has competed with Nevada for years in its pace of growth, the Florida Public Service Commission established policies of quick recovery of capital investments and, on a stand-alone basis, the state's utilities' credit metrics have remained strong.

Critical success factors include:

- A healthy and growing economy,
- Growth in population and number of customers,
- An attractive business environment, and
- An above-average residential base.

Operations

Standard & Poor's focuses on cost, reliability, safety, and quality of service when assessing a utility's operations. Management is always under pressure to optimize the use of resources, and if it is not cost-effective in meeting service standards and reliability, regulatory or competitive pressures are likely to increase. Consequently, Standard & Poor's emphasizes areas that require heightened and ongoing management attention, in the absence of which political, regulatory, or competitive problems are likely to arise.

The status of utility plant investment is reviewed with regard to generating station availability, efficiency, and utilization, as well as for compliance with existing and potential environmental and other regulatory standards. The record of plant outages, system losses, equivalent availability, load factors, heat rates, and capacity factors are examined. Important considerations include the projected capital improvements and plant additions necessary to provide high-quality, reliable service. The general condition of the assets and how well such assets are maintained are also important considerations.

Emphasis is placed on reserve margins, fuel mix, fuel contract terms, purchased-power arrangements, and system operators. Moreover, the quality and concentration of capacity is just as important as the size of reserves. Standard & Poor's recognizes that reserve requirements differ among companies, depending upon individual operating and load characteristics.

Fuel diversity provides flexibility in a changing environment. Supply disruptions and price hikes can raise rates and ignite political and regulatory pressures that ultimately lead to erosion in financial performance. Thus, the ability to switch generating sources to take advantage of cheaper fuels is viewed favorably. Dependence on any single fuel, or asset concentration in one or two large generating stations, can cause significant swings in a company's financial performance. Similarly, utilities that rely on nuclear generation receive an elevated degree of attention due to the scale, technical complexity, and politically sensitive nature of nuclear facilities. Indeed, the sound operation of nuclear units can define a utility's operational risk profile and its ability to achieve projected financial results. Standard & Poor's seeks to distinguish between those operators that have exhibited sound and stable operational performance, and the likelihood that it will continue, and those whose nuclear operations are vulnerable to problems that may impair financial results.

But having a large concentration of capacity based on fossil fuels also imposes certain risks. Coal-fired capacity is burdened with increased environmental costs related to reducing sulfur dioxide, nitrogen oxide,

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mercury, and eventually carbon dioxide emissions. Gas-fired capacity presents its own challenges, particularly the extreme volatility and significant increase in gas prices over the past few years. Buying power may be a more appropriate option for a utility than new plant construction because the utility avoids construction costs and the financial risks posed by regulatory lag when seeking recovery of costs. Purchasing power may enhance supply flexibility, fuel resource diversity, and maximize load factors. Utilities that plan to meet demand projections with a portfolio of supply-side options also may be better able to adapt to future growth uncertainties. Despite these benefits, such a strategy does commit the utility to a fixed obligation, which Standard & Poor's captures analytically through certain adjustments to financial statements. We calculate the net present value of future annual capacity payments (discounted at the company's cost of debt) over the life of the contract. Standard & Poor's then applies a risk factor against this value and adds the result to the utility's balance sheet. The risk factor is largely a function of the strength of the regulatory recovery mechanisms established to address procurement costs.

Other operational characteristics that will support an above-average evaluation for vertically integrated companies are assets that are in good physical condition and are well maintained. In addition, capital expenditures for necessary system improvements must be at manageable levels, yet sufficient to provide for constant renewal and refurbishment of the system. Operating performance, reliability statistics (such as outage duration and frequency), and efficiency measures are expected to meet industry and regional averages. Having interconnections that provide access to low-cost and diverse power supply sources is viewed favorably, as is limited environmental exposure.

For a gas company, drawing from a single interstate pipeline or relying on a particular gas basin exposes it to event risk and negative supply shocks, respectively. The ability to access multiple sources of gas supply through multiple pipelines protects the utility from such disruptions. Adequate storage access not only helps supply incremental gas needed to meet peak demand, but also provides opportunities without purchased-gas adjustment clauses to arbitrage seasonal pricing fluctuations. Gas distributors benefit from storage if the cost of buying peak gas exceeds the cost of making off-season purchases and the associated carrying cost. Outdated systems requiring extensive maintenance and capital expenditures lower profitability and efficiency metrics. Newly installed systems mainly consisting of plastic pipe require limited expenditures over the long term compared with older, cast-iron systems that need replacing as they age. In addition, operational efficiencies can be obtained through the use of new technology.

Critical success factors include:

- Well-maintained assets,
- Solid plant performance,
- Fuel diversity,
- Adequate generating reserves, and
- Compliance with environmental standards.

Competitiveness

For vertically integrated utilities, competitive factors include percentage of firm wholesale revenues that are most vulnerable to competition, industrial load, and revenue concentrations, particularly in energy intensive industries; exposure of key customers to alternative suppliers; commercial concentrations; rates charged to various customer classes; rate design and flexibility; production costs, both marginal and fixed; the regional capacity situation; and transmission constraints. A regional focus is evident, but high costs and rates relative to national averages are also of significant concern because of the potential for electricity substitutes over time.

Electricity competes with other fuels--particularly natural gas--for certain segments of the market like space heating, water heating, and cooking. Thus, high electricity prices, which can be attributed to inefficient operations, are cause for concern if customers have access to alternative energy sources. Self-generation has been a risk, as large commercial and industrial customers may take advantage of cogeneration technologies to reduce their reliance on, and in some cases to disconnect from the system. In the future, technology could pose a greater threat. Bypass risk, too, may grow if distributed generation, microgeneration, and self-generation prove more economically attractive for smaller customers.

Due to their proximity to interstate gas pipelines, some large customers can directly tie into a transmission

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line and completely bypass gas distributors' services. Although such pipelines provide key sources of gas supply for these companies, it is important to recognize this bypass risk. Ideally located gas companies have adequate transmission access but have industrial customers far from interstate pipelines.

Critical success factors include:

- Low cost structure,
- Limited bypass risk, and
- Management's commitment to lowering costs.

Management

Evaluating management is of paramount importance to Standard & Poor's analysis because management decisions affect all areas of a company's operations and financial health. Although regulation, the economy, and other outside factors certainly influence results, the quality of management ultimately determines a company's success. Standard & Poor's private meetings with senior management significantly augment the public record in the effort to appraise management. Meetings are very useful for the candid interpretation of recent developments and, importantly, to provide executives with a forum for the presentation of goals, objectives, and strategies.

Management assessment is based on tenure, turnover, industry experience, financial track record, corporate governance, a grasp of industry issues, and knowledge of regulation, of customers, and their needs. Management's ability and willingness to develop workable strategies to address system needs, and to execute reasonable and effective long-term plans are assessed. Management quality is also indicated by thoughtful balancing of multiple--and often incompatible--priorities; a record of credibility; and effective communication with the public, regulatory bodies, and the financial community.

Standard & Poor's also focuses on management's ability to achieve cost-effective operations and commitment to maintaining credit quality. This can be assessed by evaluating accounting and financial practices, capitalization and common dividend objectives, and the company's philosophy regarding growth and risk-taking.

In addition, a company's accounting and financing practices are critical to Standard & Poor's analysis. For example, proactive management will likely adopt accounting practices that are more appropriate in a competitive environment such as higher depreciation rates for electric generation equipment. Large, growing cost deferrals or regulatory assets are viewed more negatively. Management can enhance its financial condition by taking any number of discretionary actions, such as selling common equity, reducing the common dividend payout, and deleveraging. A utility's management will also be evaluated on cost-cutting ability and creativity in entering into strategic alliances that improve efficiency.

Strong corporate governance, reflected in active, independent board of directors that participate in determining and monitoring corporate controls, help to support management's credibility and corporate financial disclosure. If it is evident that a company's board is passive and does not exercise proper oversight, it weakens the checks and balances of the organization and may detract from credit quality. Included in Standard & Poor's review of corporate governance is the proportion of independent directors on the board, the breadth and depth of the directors' experience, the proportion of independent directors on the board's audit committee, and directors' compensation.

Some vertically integrated utilities have felt compelled to invest outside their traditional businesses to increase earnings, especially as stock prices have underperformed market indices. Participation in higher-risk, unregulated activities such as merchant generation, exploration and development, gathering and processing, or marketing and trading can significantly detract from the consolidated entity's credit profile. In this regard, credit ratings are not based on the regulated business only, but on the qualitative and quantitative fundamentals of the consolidated entity. Standard & Poor's considers the ratings of the regulated businesses as being less vulnerable to the negative credit influence of other affiliates and holding company activities, as relevant, where very strong structural and/or regulatory insulation exists, which tends to be more the exception than the rule.

Critical success factors include:

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- Commitment to credit quality,
- Credibility,
- Strong corporate governance, and
- Conservative financial policies, especially regarding nonregulated activities, if relevant.

Effect On Ratings

In summary, Standard & Poor's examines the key business risk drivers for vertically integrated utilities--regulation, markets, operations, competitiveness, and management--in conjunction with financial measures when assigning credit ratings. The credit quality of most vertically integrated utilities is solidly investment grade. This is a primarily a function of the existence of regulation. As discussed above, the factors that further differentiate ratings among this sector include their markets, operational track record, competitive posture, and management's risk appetite. Vertically integrated utilities generally have satisfactory business risk profile scores, with only a few having strong or weak business positions.

Appendix

Table 1

Industry Benchmarks

Business Profile	AA		A		BBB		BB	
Adjusted FFO interest coverage (x)								
1	3.0	2.5	2.5	1.5	1.5	1.0	< 1.0	< 1.0
2	4.0	3.0	3.0	2.0	2.0	1.0	< 1.0	< 1.0
3	4.5	3.5	3.5	2.5	2.5	1.5	1.5	1.0
4	5.0	4.2	4.2	3.5	3.5	2.5	2.5	1.5
5	5.5	4.5	4.5	3.8	3.8	2.8	2.8	1.8
6	6.0	5.2	5.2	4.2	4.2	3.0	3.0	2.0
7	8.0	6.5	6.5	4.5	4.5	3.2	3.2	2.2
8	10.0	7.5	7.5	5.5	5.5	3.5	3.5	2.5
9	N/A	N/A	10.0	7.0	7.0	4.0	4.0	2.8
10	N/A	N/A	11.0	8.0	8.0	5.0	5.0	3.0
Adjusted FFO/average total debt (%)								
1	20.0	15.0	15.0	10.0	10.0	5.0	< 5.0	< 5.0
2	25.0	20.0	20.0	12.0	12.0	8.0	< 8.0	< 8.0
3	30.0	25.0	25.0	15.0	15.0	10.0	10.0	5.0
4	35.0	28.0	28.0	20.0	20.0	12.0	12.0	8.0
5	40.0	30.0	30.0	22.0	22.0	15.0	15.0	10.0
6	45.0	35.0	35.0	28.0	28.0	18.0	18.0	12.0
7	55.0	45.0	45.0	30.0	30.0	20.0	20.0	15.0
8	70.0	55.0	55.0	40.0	40.0	25.0	25.0	15.0
9	N/A	N/A	65.0	45.0	45.0	30.0	30.0	20.0
10	N/A	N/A	70.0	55.0	55.0	40.0	40.0	25.0
Adjusted total debt/total capital (%)								
1	48.0	55.0	55.0	60.0	60.0	70.0	> 70.0	> 70.0
2	45.0	52.0	52.0	58.0	58.0	68.0	> 68.0	> 68.0
3	42.0	50.0	50.0	55.0	55.0	65.0	65.0	70.0
4	38.0	45.0	45.0	52.0	52.0	62.0	62.0	68.0
5	35.0	42.0	42.0	50.0	50.0	60.0	60.0	65.0
6	32.0	40.0	40.0	48.0	48.0	58.0	58.0	62.0
7	30.0	38.0	38.0	45.0	45.0	55.0	55.0	60.0
8	25.0	35.0	35.0	42.0	42.0	52.0	52.0	58.0
9	N/A	N/A	32.0	40.0	40.0	50.0	50.0	55.0

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10 N/A N/A 25.0 35.0 35.0 48.0 48.0 52.0
Note: Business profile scores are characterized from '1' (excellent) to '0' (weak). FFO--Funds from operations. N/A--Not applicable.

Table 2

Vertically Integrated Utilities

Company	Corporate credit rating	Business profile score
Aquila Inc.	B/CW-Pos/B-2	6
AGL Resources Inc.	A-/Negative/A-2	4
Alabama Power Co.	A/Stable/A-1	4
ALLETE Inc.	BBB+/Stable/A-2	5
Ameren Corp.	BBB+/CW-Neg/A-2	6
Appalachian Power Co.	BBB/Stable/-	5
Arizona Public Service Co.	BBB-/Stable/A-3	6
Almos Energy Corp.	BBB/Stable/A-2	4
Black Hills Power Inc.	BBB-/Negative/-	6
Central Illinois Light Co.	BBB+/CW-Neg/-	7
Central Vermont Public Service Corp.	BB+/Stable/-	6
CILCORP Inc.	BBB+/CW-Neg/-	7
Cincinnati Gas & Electric Co.	BBB/Positive/A-2	6
Cleco Power LLC	BBB/Negative/-	6
Cleveland Electric Illuminating Co.	BBB/Stable/-	6
Consolidated Natural Gas Co.	BBB/Stable/A-2	6
Consumers Energy Co.	BB/Stable/-	6
Dayton Power & Light Co.	BB+/Positive/-	5
Detroit Edison Co.	BBB/Stable/A-2	6
Duke Power Co. LLC	BBB/Positive/A-2	4
El Paso Electric Co.	BBB/Stable/-	6
Empire District Electric Co.	BBB-/Stable/A-3	6
Energy East Corp.	BBB+/Negative/A-2	3
Enogex Inc.	BBB+/Stable/-	7
Entergy Arkansas Inc.	BBB/Negative/-	5
Entergy Gulf States Inc.	BBB/Negative/-	6
Entergy Louisiana LLC	BBB/Negative/-	5
Entergy Mississippi Inc.	BBB/Negative/-	6
Entergy New Orleans Inc.	D/-/-	8
Equitable Resources Inc.	A-/CW-Neg/A-2	8
Florida Power & Light Co.	A/CW-Neg/A-1	4
Georgia Power Co.	A/Stable/A-1	4
Green Mountain Power Corp.	BBB/CW-Pos/-	5
Gulf Power Co.	A/Stable/-	4
Hawaiian Electric Co. Inc.	BBB+/Negative/A-2	5
IDACORP Inc.	BBB+/Negative/A-2	5
Idaho Power Co.	BBB+/Negative/A-2	5
Indiana Michigan Power Co.	BBB/Stable/-	6
Indianapolis Power & Light Co.	BB+/Positive/-	4
Interstate Power & Light Co.	BBB+/Stable/A-2	5
IPALCO Enterprises Inc.	BB+/Positive/-	4
Kansas City Power & Light Co.	BBB/Stable/A-2	6
Kansas Gas & Electric Co.	BB+/Positive/-	6
Kentucky Power Co.	BBB/Stable/-	5
Kentucky Utilities Co.	BBB+/Stable/A-2	5
Kentville Gas & Electric Co.	BBB+/Stable/-	5

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[ATTACHMENT 1] Any Credit Rating Agency Assessing CDOs Formally Integrated Certain Subsequent Page 9 of 10

Madison Gas & Electric Co.	AA-/Stable/A-1+	4
Michigan Consolidated Gas Co.	BBB/Stable/A-2	4
MidAmerican Energy Co.	A-/Stable/A-1	5
Mississippi Power Co.	A/Stable/A-1	4
Monongahela Power Co.	BB+/Positive/-	5
Montana-Dakota Utilities Co.	BBB+/Stable/-	6
National Fuel Gas Co.	BBB+/Stable/A-2	7
Nevada Power Co.	B+/Positive/-	6
New York State Electric & Gas Corp.	BBB+/Negative/A-2	3
NiSource	BBB/Stable/-	4
Northern Indiana Public Service Co.	BBB/Stable/-	5
Northern States Power Co.	BBB/Stable/A-2	5
Northern States Power Wisconsin	BBB+/Stable/-	4
Ohio Edison Co.	BBB/Stable/A-2	6
Oklahoma Gas & Electric Co.	BBB+/Stable/A-2	5
Pacific Gas & Electric Co.	BBB/Stable/A-2	5
PacificCorp	A-/Stable/A-1	5
Pennsylvania Power Co.	BBB/Stable/-	6
Pinnacle West Capital Corp.	BBB-/Stable/A-3	6
PNM Resources Inc.	BBB/Negative/A-3	6
Portland General Electric Co.	BBB+/Negative/A-2	5
Progress Energy Carolinas Inc.	BBB/Positive/A-2	5
Progress Energy Florida Inc.	BBB/Positive/A-2	4
PSI Energy Inc.	BBB/Positive/A-2	4
Public Service Co. of Colorado	BBB/Stable/A-2	4
Public Service Co. of New Hampshire	BBB/Stable/-	5
Public Service Co. of New Mexico	BBB/Negative/A-3	6
Public Service Co. of Oklahoma	BBB/Stable/-	5
Puget Energy Inc.	BBB/Stable/-	4
Puget Sound Energy Inc.	BBB-/Stable/A-3	4
Questar Market Resources Inc.	BBB+/Stable/-	8
Rochester Gas & Electric Corp.	BBB+/Negative/-	3
San Diego Gas & Electric Co.	A/Stable/A-1	5
Savannah Electric & Power Co.	A/Stable/-	4
SCANA Corp.	A-/Stable/-	4
Sierra Pacific Power Co.	B+/Positive/-	6
Sierra Pacific Resources	B+/Positive/B-2	6
South Carolina Electric & Gas Co.	A-/Stable/A-2	4
Southern California Edison Co.	BBB+/Stable/A-2	6
Southern Co.	A/Stable/A-1	4
Southern Indiana Gas & Electric Co.	A-/Stable/-	4
Southwestern Electric Power Co.	BBB/Stable/-	5
Southwestern Public Service Co.	BBB/Stable/A-2	5
System Energy Resources Inc.	BBB-/Negative/-	7
Tampa Electric Co.	BBB-/Stable/A-3	4
Toledo Edison Co.	BBB/Stable/-	6
Tucson Electric Power Co.	BB/Stable/B-2	6
TXU U.S. Holdings Co.	BBB-/Negative/-	8
Union Electric Co.	BBB+/CW-Neg/A-2	5
Union Light Heat & Power Co.	BBB/Positive/-	5
Vectren Utility Holdings Inc.	A-/Stable/A-2	3
Virginia Electric & Power Co.	BBB/Stable/A-2	5

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Westar Energy Inc.	BB+/Positive/--	5
Wisconsin Electric Power Co.	A-/Negative/A-2	4
Wisconsin Energy Corp.	BBB+/Negative/A-2	5
Wisconsin Power & Light Co.	A-/Stable/A-2	4
Wisconsin Public Service Corp.	A+/CW-Neg/A-1	4
Xcel Energy Inc.	BBB/Stable/A-2	5

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UTILITIES

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"Buy Versus Build": Debt Aspects of Purchased-Power Agreements

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Why Capitalize PPAs?

Determining the Risk Factor for PPAs

Adjusting Financial Ratios

Utility Company Example

Credit Implications

Standard & Poor's Ratings Services views electric utility purchased-power agreements (PPA) as debt-like in nature, and has historically capitalized these obligations on a sliding scale known as a "risk spectrum." Standard & Poor's applies a 0% to 100% "risk factor" to the net present value (NPV) of the PPA capacity payments, and designates this amount as the debt equivalent.

While determination of the appropriate risk factor takes several variables into consideration, including the economics of the power and regulatory treatment, the overwhelming factor in selecting a risk factor has been a distinction in the likelihood of payment by the buyer. Specifically, Standard & Poor's has divided the PPA universe into two broad categories: take-or-pay contracts (TOP; hell or high water) and take-and-pay contracts (TAP; performance based). To date, TAP contracts have been treated far more leniently (e.g., a lower risk factor is applied) than TOP contracts since failure of the seller to deliver energy, or perform, results in an attendant reduction in payment by the buyer. Thus, TAP contracts were deemed substantially less debt-like. In fact, the risk factor used for many TAP obligations has been as low as 5% or 10% as opposed to TOPs, which have been typically at least 50%.

Standard & Poor's originally published its purchased-power criteria in 1990, and updated it in 1993. Over the past decade, the industry underwent significant changes related to deregulation and acquired a history with regard to the performance and reliability of third-party generators. In general, independent generation has performed well; the likelihood of nondelivery--and thus release from the payment obligation--is low. As a result, Standard & Poor's believes that the distinction between TOPs and TAPs is minimal, the result being that the risk factor for TAPs will become more stringent. This article reiterates Standard & Poor's views on purchased power as a fixed obligation, how to quantify this risk, and the credit ramifications of purchasing power in light of updated observations.

Why Capitalize PPAs?

Standard & Poor's evaluates the benefits and risks of purchased power by adjusting a purchasing utility's reported financial statements to allow for more meaningful comparisons with utilities that build generation. Utilities that build typically finance construction with a mix of debt and equity. A utility that leases a power plant has entered into a debt transaction for that facility; a capital lease appears on the utility's balance sheet as debt. A PPA is a similar fixed commitment. When a utility enters into a long-term PPA with a fixed-cost component, it takes on financial risk. Furthermore, utilities are typically not financially compensated for the risks they assume in purchasing power, as purchased power is usually recovered dollar-for-dollar as an operating expense.

As electricity deregulation has progressed in some countries, states, and regions, the line has blurred between traditional utilities, vertically integrated utilities, and merchant energy companies, all of which are in the generation business. A common contract that has emerged is the tolling agreement, which gives an energy merchant company the right to purchase power from a specific power plant. (see "Evaluating Debt Aspects of Power Tolling Agreements," published Aug. 26, 2002). The energy merchant, or toller, is typically responsible for procuring and delivering gas to the plant when it wants the plant to generate power. The power plant operator must maintain plant availability and produce electricity at a contractual heat rate. Thus, tolling contracts exhibit characteristics of both PPAs and leases. However, tollers are typically unregulated entities competing in a competitive marketplace. Standard & Poor's has determined that a 70% risk factor should be applied to the NPV of the fixed tolling payments, reflecting its assessment of the risks borne by the toller, which are:

- Fixed payments that cover debt financing of power plant (typically highly leveraged at about 70%),
- Commodity price of inputs,
- Energy sales (price and volume), and
- Counterparty risk.

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Determining the Risk Factor for PPAs

Alternatively, most entities entering into long-term PPAs, as an alternative to building and owning power plants, continue to be regulated utilities. Observations over time indicate the high likelihood of performance on TAP commitments and, thus, the high likelihood that utilities must make fixed payments. However, Standard & Poor's believes that vertically integrated, regulated utilities are afforded greater protection in the recovery of PPAs, compared with the recovery of fixed tolling charges by merchant generators. There are two reasons for this. First, tariffs are typically set by regulators to recover costs. Second, most vertically integrated utilities continue to have captive customers and an obligation to serve. At a minimum, purchased power, similar to capital costs and fuel costs, is included in tariffs as a cost of service.

As a generic guideline for utilities with PPAs included as an operating expense in base tariffs, Standard & Poor's believes that a 50% risk factor is appropriate for long-term commitments (e.g. tenors greater than three years). This risk factor assumes adequate regulatory treatment, including recognition of the PPA in tariffs; otherwise a higher risk factor could be adopted to indicate greater risk of recovery. Standard & Poor's will apply a 50% risk factor to the capacity component of both TAP and TOP PPAs. Where the capacity component is not broken out separately, we will assume that 50% of the payment is the capacity payment. Furthermore, Standard & Poor's will take counterparty risk into account when considering the risk factor. If a utility relies on any individual seller for a material portion of its energy needs, the risk of nondelivery will be assessed. To the extent that energy is not delivered, the utility will be exposed to replacing this power, potentially at market rates that could be higher than contracted rates and potentially not recoverable in tariffs.

Standard & Poor's continues to view the recovery of purchased-power costs via a fuel-adjustment clause, as opposed to base tariffs, as a material risk mitigant. A

monthly or quarterly adjustment mechanism would ensure dollar-for-dollar recovery of fixed payments without having to receive approval from regulators for changes in fuel costs. This is superior to base tariff treatment, where variations in volume sales could result in under-recovery if demand is sluggish or contracting. For utilities in supportive regulatory jurisdictions with a precedent for timely and full cost recovery of fuel and purchased-power costs, a risk factor of as low as 30% could be used. In certain cases, Standard & Poor's may consider a lower risk factor of 10% to 20% for distribution utilities where recovery of certain costs, including stranded assets, has been legislated. Qualifying facilities that are blessed by overarching federal legislation may also fall into this category. This situation would be more typical of a utility that is transitioning from a vertically integrated to a disaggregated distribution company. Still, it is unlikely that no portion of a PPA would be capitalized (zero risk factor) under any circumstances.

The previous scenarios address how purchased power is quantified for a vertically integrated utility with a bundled tariff. However, as the industry transitions to disaggregation and deregulation, various hybrid models have emerged. For example, a utility can have a deregulated merchant energy subsidiary, which buys power and off-sells it to the regulated utility. The utility in turn passes this power through to customers via a fuel-adjustment mechanism. For the merchant entity, a 70% risk factor would likely be applied to such a TAP or tolling scheme. But for the utility, a 30% risk factor would be used. What would be the appropriate treatment here? In part, the decision would be driven by the ratings methodology for the family of companies. Starting from a consolidated perspective, Standard & Poor's would use a 30% risk factor to calculate one debt equivalent on the consolidated balance sheet given that for the consolidated entity the risk of recovery would ultimately be through the utility's tariff. However, if the merchant energy company were deemed noncore and its rating was more a reflection of its stand-alone creditworthiness, Standard & Poor's would impute a debt equivalent using a 70% risk factor to its balance sheet, as well as a 30% risk-adjusted debt equivalent to the utility. Indeed, this is how the purchases would be reflected for both companies if there were no ownership relationship. This example is perhaps overly simplistic because there will be many variations on this theme. However, Standard & Poor's will apply this logic as a starting point, and modify the analysis case-by-case, commensurate with the risk to the various participants.

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Adjusting Financial Ratios

Standard & Poor's begins by taking the NPV of the annual capacity payments over the life of the contract. The rationale for not capitalizing the energy component, even though it is also a nondiscretionary fixed payment, is to equate the comparison between utilities that buy versus build--i.e., Standard & Poor's does not capitalize utility fuel contracts. In cases where the capacity and energy components of the fixed payment are not specified, half of the fixed payment is used as a proxy for the capacity payment. The discount rate is 10%. To determine the debt equivalent, the NPV is multiplied by the risk factor. The resulting amount is added to a utility's reported debt to calculate adjusted debt. Similarly, Standard & Poor's imputes an associated interest expense equivalent of 10%--10% of the debt equivalent is added to reported interest expense to calculate adjusted interest coverage ratios. Key ratios affected include debt as a percentage of total capital, funds from operations (FFO) to debt, pretax interest coverage, and FFO interest coverage. Clearly, the higher the risk factor, the greater the effect on adjusted financial ratios. When analyzing forecasts, the NPV of the PPA will typically

decrease as the maturity of the contract approaches.

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Utility Company Example

To illustrate some of the financial adjustments, consider the simple example of ABC Utility Co. buying power from XYZ Independent Power Co. Under the terms of the contract, annual payments made by ABC Utility start at \$90 million in 2003 and rise 5% per year through the contract's expiration in 2023. The NPV of these obligations over the life of the contract discounted at 10% is \$1.09 billion. In ABC's case, Standard & Poor's chose a 30% risk factor, which when multiplied by the obligation results in \$327 million. Table 1 illustrates the adjustment to ABC's capital structure, where the \$327 million debt equivalent is added as debt, causing ABC's total debt to capitalization to rise to 59% from 54% (11 plus 48). Table 2 shows that ABC's pretax interest coverage was 2.6x, without adjusting for off-balance-sheet obligations. To adjust for the XYZ capacity payments, the \$327 million debt adjustment is multiplied by a 10% interest rate to arrive at about \$33 million. When this amount is added to both the numerator and the denominator, adjusted pretax interest coverage falls to 2.3x.

Table 1 ABC Utility Co. Adjustment to Capital Structure

	Original capital structure		Adjusted capital structure	
	\$	%	\$	%
Debt	1,400	54	1,400	48
Adjustment to debt	-	-	327	11
Preferred stock	200	8	200	7
Common equity	1,000	38	1,000	34
Total capitalization	2,600	100	2,927	100

Table 2 ABC Utility Co. Adjustment to Pretax Interest Coverage

		Original pretax interest coverage (x)		Adjusted pretax interest coverage (x)	
Net income	120				
Income taxes	65	300		(300+33)	
Interest expense	115	115	= 2.6x	(115+33)	= 2.3x
Pretax available	300				

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Credit Implications

The credit implications of the updated criteria are that Standard & Poor's now believes that historical risk factors applied to TAP contracts with favorable recovery mechanisms are insufficient to capture the financial risk of these fixed obligations. Indeed, in many cases where 5% and 10% risk factors were applied, the change in adjusted financial ratios (from unadjusted) was negligible and had no effect on ratings. Standard & Poor's views the high probability of energy delivery and attendant payment warrants recognition of a higher debt equivalent when

capitalizing PPAs. Standard & Poor's will attempt to identify utilities that are more vulnerable to modifications in purchased-power adjustments. Utilities can offset these financial adjustments by recognizing purchased power as a debt equivalent, and incorporating more common equity in their capital structures. However, Standard & Poor's is aware that utilities have been reluctant to take this action because many regulators will not recognize the necessity for, and authorize a return on, this additional wedge of common equity. Alternatively, regulators could authorize higher returns on existing common equity or provide an incentive return mechanism for economic purchases. Notwithstanding unsupportive regulators, the burden will still fall on utilities to offset the financial risk associated with purchases by either qualitative or quantitative means.

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Standard & Poor's Ratings Services is requesting comments from market participants about one specific element of its refined methodology for imputing debt to purchased power obligations involving utility companies.

Proposal Summary

Standard & Poor's is abandoning its practice of not imputing debt for purchased power agreements (PPA) with terms of three years or less. In addition, where there is a high probability that the utility will have an ongoing obligation to serve load beyond the nominal tenor of short-term contracts, which is almost always the case, Standard & Poor's is contemplating providing evergreen treatment to PPA obligations to reflect the long-term load serving obligations borne by utilities. Unless an electric utility faces a declining population or real prospects of customer migration to other suppliers, both of which are rare, any near-term or intermediate power supply contracts will need to be renewed or replaced with contracted or self-built capacity to continue to meet load obligations.

We acknowledge that the process of providing evergreen treatment to outstanding contracts is imprecise. Uncertainties surround the level of capacity prices that should be assumed and the duration for which contracts should be extended to reflect the load-serving obligation. Therefore, we welcome input on evergreen-related issues as we refine these aspects of the criteria.

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Response Deadline

Please submit your comments on this proposal through Dec. 15, 2006, to criteriacomments@standardandpoors.com

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Imputation Is Important For Credit Analysis

Standard & Poor's has for many years considered PPAs as financial obligations that electric utilities incur when they elect to purchase rather than build their own capacity, and this obligation has affected our view of utilities' creditworthiness. Standard & Poor's has historically applied a "risk factor" of 0% to 100% to the net present value (NPV) of the PPA capacity payments, and capitalized this amount. The risk factor's role is to calibrate the stringencies of debt imputation relative to our evaluation of the certainty of recovery of power purchase costs by virtue of regulatory and legislative protections. The imputation of debt and debt service is important to our credit analysis because the resulting financial adjustments affect several key credit metrics used when we assess credit quality.

The risk factor acts as a proxy for the proportion of risk borne by the utility. At 100%, all risk related to contractual obligations rests on the company with no mitigating regulatory or legislative support. Conversely, a 0% risk factor indicates that the burden of the contractual payments rests solely with ratepayers.

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Reviewing Existing Criteria--And A Few Refinements

From time to time, Standard & Poor's has revisited the methodology employed for making the financial adjustments that incorporate the obligations created by PPAs in its credit evaluations. This article discusses the most recent refinements. It also includes a discussion of additional areas that are under consideration as potential future refinements to our ratings methodology. While we expect very modest, if any, rating changes to result from these modifications, the proposed modifications are being disseminated in this article in the interest of ensuring the ongoing transparency of our rating methodology.

Standard & Poor's published its original PPA criteria in 1991, and provided updates in 1993 and 2003. During this time, the industry has established a very strong track record of demonstrating the viability and effectiveness of the various recovery mechanisms that state regulators have established for costs associated with contracted generation capacity. Recovery mechanisms have largely performed as intended, and related write-offs have proven to be very low. These results justify the continued application of risk factors that serve to temper, often substantially, the amount of debt imputation. Ensuring meaningful comparability in the financial commitments among utilities that are building and those that are purchasing capacity to satisfy load obligations is the rationale for our imputation of debt and debt service for PPAs. PPAs essentially represent substitutes for direct, debt-financed, capital investments. In a sense, a utility that has entered into a PPA has contracted with a supplier to make the financial investment on its behalf. The analytical goal of our financial adjustments for PPAs is to reflect the fixed obligation in a way that depicts any credit exposure that is added by the presence of PPAs. That said, a PPA also shifts various risks to the supplier, such as construction risk and most of the operating risk. As a result, the principal risk borne by a utility that relies on PPAs is the recovery of the financial obligation in rates. While it is the

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utility that must of course make these payments, however, to the extent that regulators and, in certain cases, legislatures, have structured recovery to assign the burden to ratepayers, the utilities' risk diminishes.

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Refinements To The Methodology

With only modest liberalization of the treatment of PPAs, we are perpetuating the current ratings criteria. Current guidelines for utilities whose capacity payments are recovered in base rates provides for the application of a 50% risk factor to the NPV of the capacity payments. This approach will continue. The NPV is calculated using the utility's average cost of debt (excluding securitization debt), rather than the standardized 10% discount rate used previously. For purposes of adjusting cash flow measures, implied interest expense is calculated on the imputed debt amount. This is accomplished by applying the average cost of debt to the relevant year's imputed debt level.

To date, where PPA capacity costs were recovered through a fuel adjustment clause (FAC), as compared with base rate recovery, a risk factor of 30% has been generally used in lieu of the 50% risk factor. We view the recovery of the capacity component of a PPA through a FAC as providing greater certainty and timeliness than recovery through a base rate mechanism. (The base rate mechanism generally has greater potential for under-recovery due to variations in volume sales and fluctuations in fuel prices over time.) Based on the effectiveness of FAC mechanisms, we will adjust modestly the risk factor of 30% down to 25%.

We recognize that there are certain jurisdictions that have true-up mechanisms that are more favorable and frequent than the review of base rates, but still do not amount to pure FACs. Some of these mechanisms are triggered when certain financial thresholds are met or after prescribed periods of time have passed. In these instances, a risk factor between the revised 25% FAC risk factor and the 50% risk factor will be employed in calculating adjusted ratios.

In those instances where recovery of PPA-related capacity costs is guaranteed by a legislative mechanism, the level of the risk factor will be determined by the timeliness provided by the legislative true-up mechanism. The strength of the mechanism can result in risk factors as low as 0% because legislatively prescribed recovery mechanisms are viewed as providing utilities with a greater level of protection than that provided by regulatory orders.

There are a number of utilities to which Standard & Poor's does not impute any PPA-related debt. Specifically, Standard & Poor's does not impute debt for supply arrangements if a utility acts merely as a conduit for the delivery of power (e.g., because it has been transformed into a pure transmission and distribution utility by regulators or legislation that has directed the divestiture of all generation assets). For example, in New Jersey, the vertically integrated utility companies were transformed into pure transmission and distribution utilities. The state commission, or an appointed proxy, leads an annual auction in which suppliers

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bid to serve the state's retail customers, and the utilities are protected from supplier default. In New Jersey, the power supply function of the state's utilities has essentially been reduced to the delivery of power and the collection of revenues from retail customers on behalf of the suppliers. Therefore, while Standard & Poor's has continued to impute debt to New Jersey's utilities for qualifying facility and exempt wholesale generator contracts to which the utilities are parties, we do not do so for other electricity supply contracts where the utilities merely act as conduits between the winners of the regulator's supply auction and the end-user, retail customers.

Finally, Standard & Poor's is abandoning the practice of not imputing debt for contracts with terms of three years or less. In addition to abandoning our historical three-year rule, we are contemplating applying an evergreen mechanism for short-term contracts. Because expiring contracts must be replaced with either debt-financed capacity additions or replacement PPAs for regulated utilities to meet load serving obligations, Standard & Poor's must look beyond the termination of near-term and intermediate-term contracts to approximate the fixed obligations that will succeed the current contracts in evaluating a utility's financial profile.

The process of providing evergreen treatment to outstanding contracts is imprecise. Uncertainties surround the level of capacity prices that should be assumed and the duration for which contracts should be extended to reflect the load-serving obligation. Therefore, we welcome input on evergreen-related issues as we refine these aspects of the criteria over the next 45 days.

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Adjusting Financial Ratios

Standard & Poor's determines the debt equivalence that it will add to a utility's balance sheet as a result of being a party to a PPA by calculating the NPV of the annual capacity payments over the life of the contract because it is the capacity payment that represents the vehicle that funds the recovery of the supplier's investment in the generation asset.

Where the PPA contract price is stated as a single, all-in energy price, Standard & Poor's will use a proxy capacity charge, stated in dollars per kilowatt-year, and multiply that figure by the number of kilowatts under contract. This number will be updated from time to time to reflect prevailing costs for the development and financing of the marginal unit, a combustion turbine. This is a departure from the historical practice of simply halving all-in energy payments and assuming a one-to-one ratio of energy to capacity payments. This new element of the rating methodology will also be applied to generation with extremely low variable costs whose price is stated as an all-in energy price, such as nuclear and wind generation.

The discount rate used in calculating an NPV, imputed debt, and imputed interest expense is the utility's average interest rate on its outstanding debt (excluding securitization related debt). Standard & Poor's multiplies the NPV of the stream of capacity payments by the appropriate risk factor, which will generally be

HECO-1915
DOCKET NO. 2006-0386
PAGE 5 OF 6

Request For Comments: Imputing Debt To Purchased Power Obligations

Page 5 of 6

25% for capacity payments that are recovered through fuel adjustment clauses and 50% for capacity payments that are recovered in base rates. This amount is added to a utility's reported debt to calculate adjusted debt. Similarly, Standard & Poor's imputes an associated interest expense by multiplying a given year's NPV of PPA-related capacity payments by the risk factor and the company's average interest rate on outstanding debt. The resulting number is added to reported interest expense to calculate adjusted interest coverage ratios.

Key ratios affected include:

- Balance sheet debt is increased by the calculated NPV of the stream of capacity payments, after the application of the risk factor, which is added to the numerator and denominator in calculating an adjusted debt-to-capitalization ratio;
- The implied interest expense derived from applying the average interest rate to the NPV figure is simultaneously treated as a reduction in power purchase expenses and added to interest expense for the calculation of the adjusted funds from operations (FFO) to interest ratio; and
- The FFO to total debt ratio is adjusted by adding the NPV of capacity payments, after the application of the risk factor, to debt in the denominator and an implied depreciation expense is added to FFO.

The depreciation expense adjustment, the last element of the principal financial adjustments cited above, represents a new element within the context of financial adjustments for PPAs (though it has been a long-standing component of the analytical adjustments for leases). Adding an implied depreciation expense to FFO is another element that aligns the analytical treatment of PPAs with the concept of purchased power as a substitute for self-build. The depreciation expense adjustment is a vehicle for capturing the ownership-like attributes of the contracted asset and has the effect of mitigating some of the ratio impact of debt imputation.

The mechanics of these adjustments are illustrated in the table.

Adjustments To Ratios						
(Mil. \$)	Year 1	Year 2	Year 3	Year 4	Year 5	Thereafter
Funds from operations	2,500					
Interest expense	650					
Directly issued debt	10,000					
Shareholders' equity	9,000					
Fixed capacity commitments	500	500	500	500	500	4,000
<i>NPV of fixed capacity commitments</i>						
Using a 6.5% discount rate	4,079					
Applying a 25% risk factor	1,020					
<i>Unadjusted ratios</i>						

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PAGE 6 OF 6

Request For Comments: Imputing Debt To Purchased Power Obligations

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FFO/interest (x)	4.9					
FFO/total debt (%)	25					
Debt/capitalization (%)	53					
<i>Ratios adjusted for debt imputation</i>						
FFO/interest (x)*	4.6					
FFO/total debt (%)†	23					
Debt/capitalization (%)§	55					
*Adds implied interest to the numerator and denominator. Also adds implied depreciation to the numerator. †Adds implied depreciation to the numerator and adds implied debt to total debt. §Adds implied debt to both the numerator and the denominator.						

Clearly, the higher the risk factor, the greater the effect on adjusted financial ratios. The NPV of the PPA will typically decrease as the maturity of the contract approaches, but on a portfolio basis, the overall NPV may remain somewhat static as old contracts roll off and new ones are executed.

[↑ back to top](#)

Conclusion

Absent legislative assurance of recovery, or an obligation that is little more than a fiduciary role for a transmission and distribution utility, PPAs constitute a financial risk by adding fixed obligations, though history is clearly on the side of full recovery. There is ample evidence that utility regulators and commissions have intended these costs to be for the account of the ratepayer, which justifies the continued use of risk factors. The modest revisions to our methodology seek to perpetuate our use of financial adjustments that reflect the legislative and regulatory protections that mitigate regulated utilities' exposure to the fixed obligations created by PPAs.

[↑ back to top](#)

CA-IR-20

Please identify any changes in methodology used to calculate the costs of short-term debt, long-term debt, hybrid securities and preferred stock in this case, relative to the methodology used in the most recent HECO rate proceedings.

HECO Response:

Please refer to HECO's response to CA-IR-10.

CA-IR-21

Witness T-21 Steven M. Fetter

RE: Statement on page 6, lines 15-16 Regarding "Recessionary Fears that Currently Exist about the U.S. Economy."

Please indicate if Mr. Fetter believes that the possibility of a recession should be viewed as a risk to HECO and if Mr. Fetter believes that HECO should receive a higher return on equity because of a fear of recession.

HECO Response:

Mr. Fetter believes that the possibility of a recession should be viewed as a risk to HECO.

Regarding the question on whether Mr. Fetter believes that HECO should receive a higher return on equity because of a fear of recession, Mr. Fetter is not a witness on return on common equity.

What Mr. Fetter stated in his testimony is that instability in the financial markets has created challenges for utility managements and regulators to an extent that has never existed in the past. While that market upset has moderated to a degree during the past few years, due to the utility sector's ongoing need for substantial amounts of investor capital, whether for infrastructure enhancement (including steps necessary to comply with environmental laws and regulations), maintenance of continuing reliability, or the securing of fuel and/or power supply on either a planned or unscheduled basis, the utility sector continues to feel related effects. Instability in the financial markets in addition to the recessionary fears that currently exist about the U.S. economy lead to the conclusion that utilities operating within today's more stressful environment and their regulatory authorities should strive to minimize the regulatory uncertainties that could affect a utility's financial profile, its credit ratings, and thus its access to capital on favorable terms (HECO T-21, p. 6).

Mr. Fetter also recommended that with all the turmoil that has occurred within the electric utility sector during the past eight years, utilities and their regulators should strive to

secure corporate ratings no lower than “BBB+/Baa1”, with an ultimate goal of a rating within the “A” category. A utility that has achieved such goal will have built up sufficient protection for its customers and investors so as to withstand virtually all of the setbacks that have financially harmed certain companies within the electric sector during the recent past. Accordingly, Mr. Fetter believes that both the Company and the Commission should seek to sustain an environment within which the ratings agencies will, at a minimum, maintain the Company’s current credit ratings, and, optimally, improve those ratings over time (HECO T-21, page 27).

CA-IR-22

Witness T-21 Steven M. Fetter

RE: Statement on pages 9-12 Regarding Importance of Regulation in Security Ratings.

Please provide Mr. Fetter's views, as well as any rating agency views he is aware of, concerning the relative regulatory environment in Hawaii.

HECO Response:

Mr. Fetter views that Hawaii's regulatory environment is within the mainstream of regulatory climates across the U.S.

Mr. Fetter believes that the rating agencies agree with his assessment as illustrated by the following comments:

Moody's Credit Opinion: "Hawaiian Electric Company, Inc.," December 10, 2007:

"While regulatory decisions rendered by the Hawaii PUC have generally resulted in relatively supportive outcomes, Moody's notes a continuing degree of regulatory lag that exists in reaching final decisions in Hawaii. ...timely and supportive regulatory decisions remain key to the maintenance of HECO's credit quality [and Moody's believes] that timely regulatory support for the company's sizable capital program will occur."

S&P Research: "Hawaiian Electric Co. Inc.," May 23, 2008:

"HECO's business profile strengths [include] good recovery of fuel and purchased power mechanisms, and adequate regulatory protections ... HEI's stable outlook reflects the supportive interim rate decisions in all three utility rate cases pending before the Hawaii PUC and assumes that no material changes will be made to utility [energy cost adjustment clauses], which are a critical underpinning to the ratings."

CA-IR-23

Witness T-21 Steven M. Fetter

Please provide copies of source documents cited in the following footnotes:

- a. 2,
- b. 3,
- c. 8,
- d. 13,
- e. 14,
- f. 15,
- g. 16, and
- h. 17.

HECO Response:

- a. See Attachment 1 of this response.
- b. See Attachment 2 of this response.
- c. See Attachment 3 of this response.
- d. See Attachment 4 of this response.
- e. See Attachment 3 of this response.
- f. See Attachment 5 of this response.
- g. See Attachment 6 of this response.
- h. See Attachment 7 of this response.

Note: The information requested is copyrighted. The copies are being provided under the “fair use” exception to the copyright laws. Any copies made of the requested information are subject to the copyright laws.

Attachments 1 to 7 are voluminous and available for inspection at HECO's Regulatory Affairs Division office, Suite 1301, Central Pacific Plaza, 220 South King Street, Honolulu, Hawaii. Please contact Dean Matsuura at 543-4622 to make arrangements to inspect the requested information. Electronic copies of the attachments are being provided.

CA-IR-24

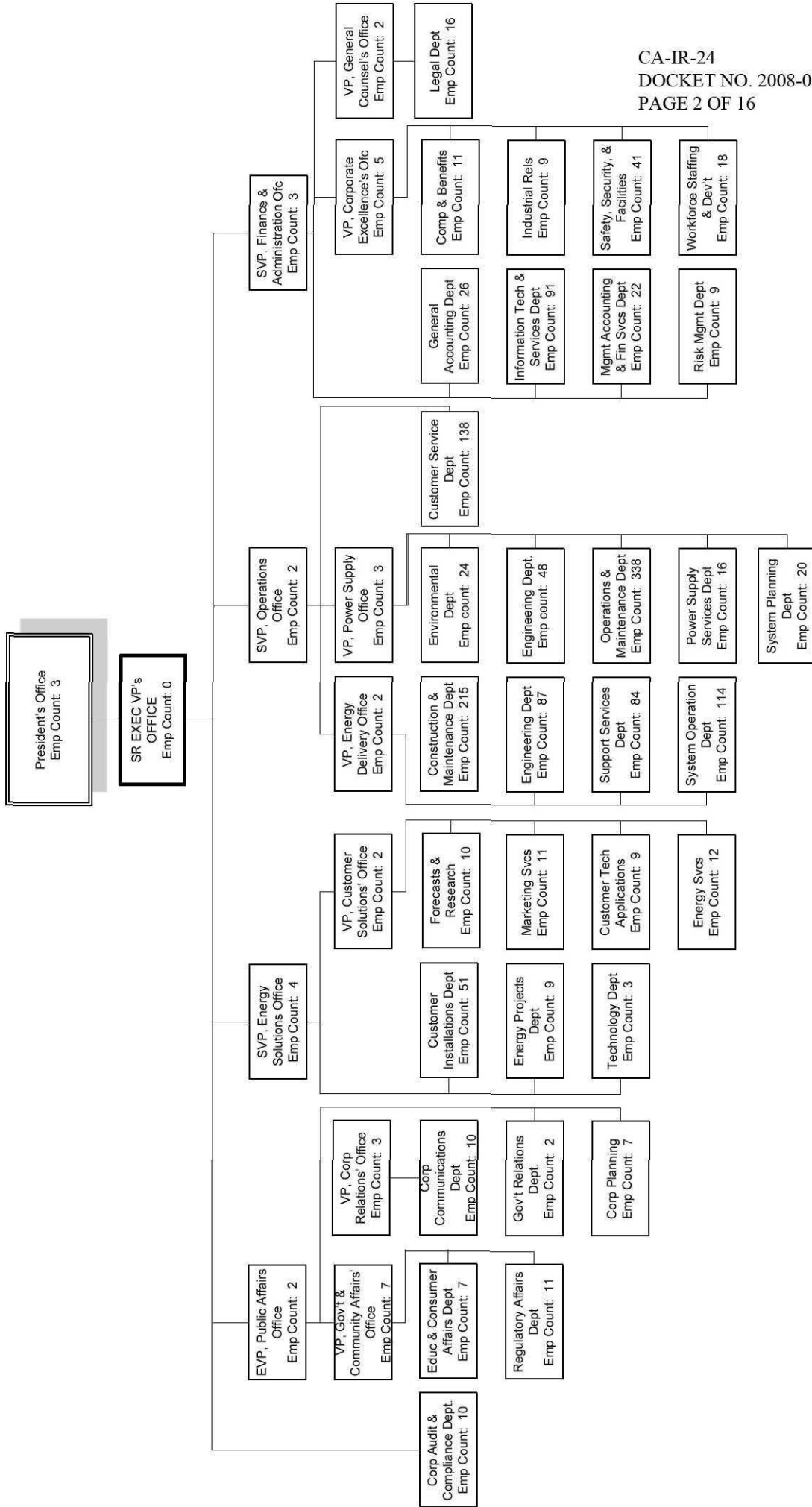
Please provide a complete copy of the most current available HECO management organization chart, illustrating reporting relationships among management personnel, departmental organizations and relative staffing levels within each department.

HECO Response:

See pages 2 through 16 for the requested HECO management organization charts, which are current as of August 11, 2008. These charts reflect organizational changes that have occurred since the submission of direct testimony in this proceeding.

HAWAIIAN ELECTRIC COMPANY, INC.

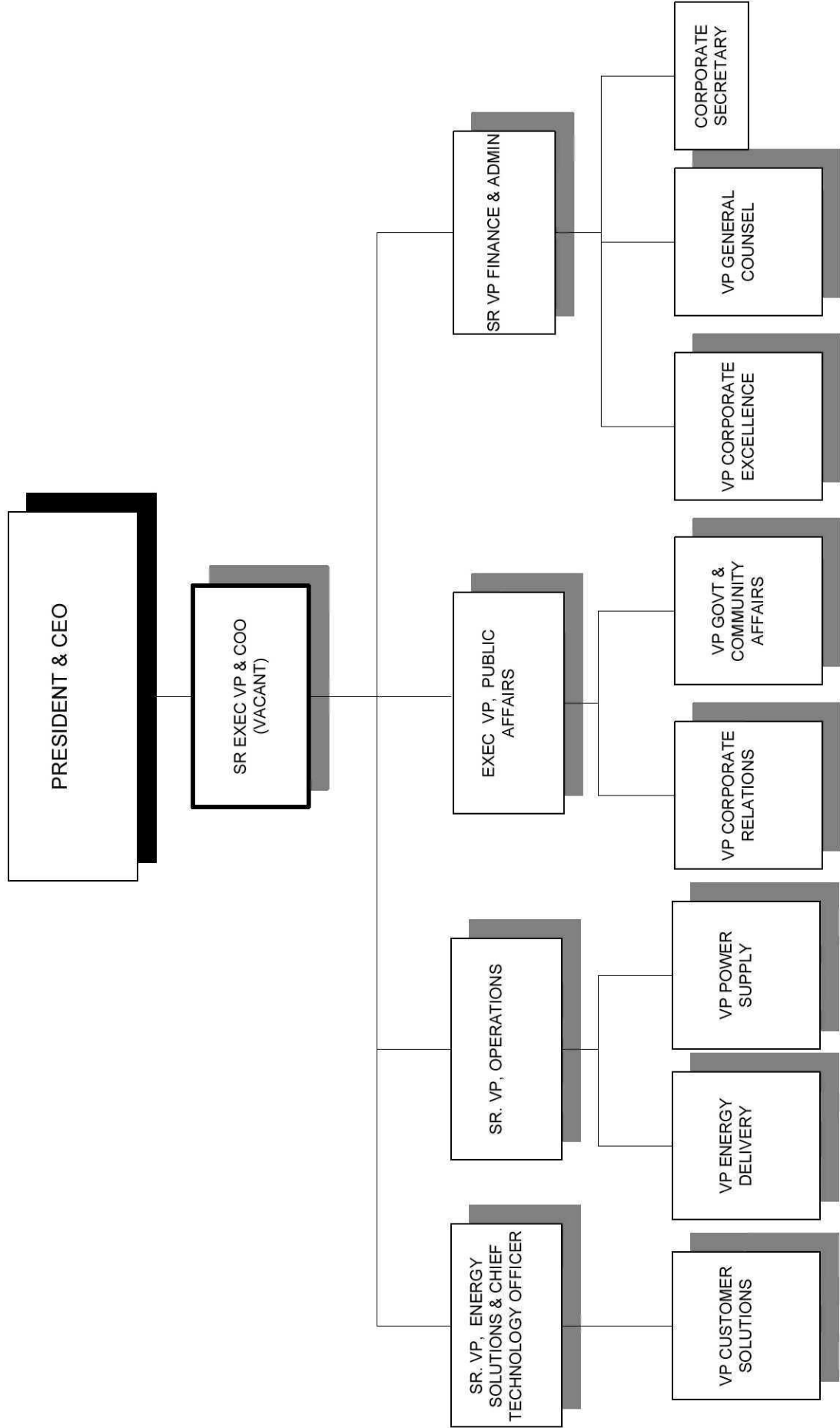
Actual employee count as of 8/11/08



CA-IR-24
DOCKET NO. 2008-0083
PAGE 2 OF 16

*Employee counts include interns and temporary employees on HECO payroll, but exclude employees covered under the DSM surcharge

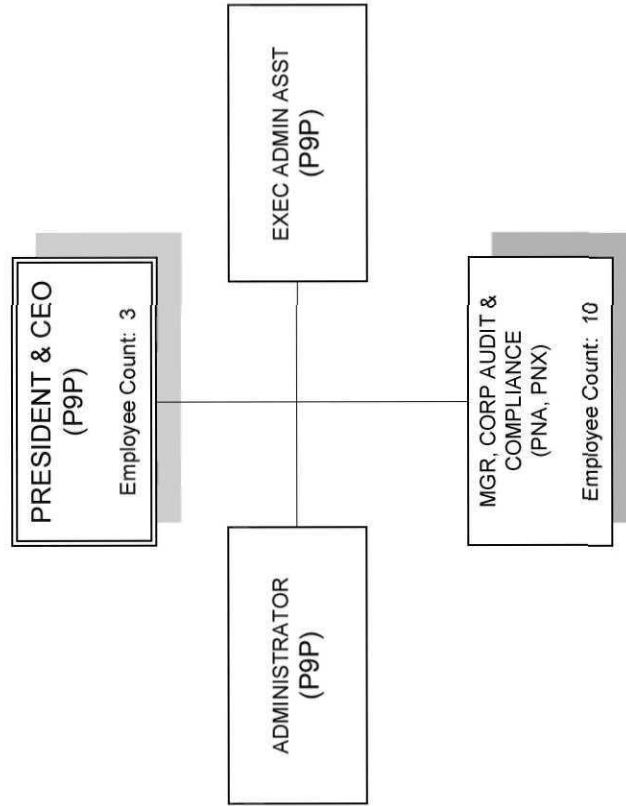
HAWAIIAN ELECTRIC COMPANY, INC.



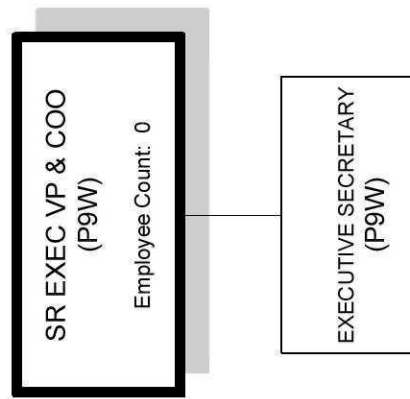
Note: See page 4 for reporting of Corporate Audit and Compliance Department

PRESIDENT – HECO

Actual employee count as of 8/11/08

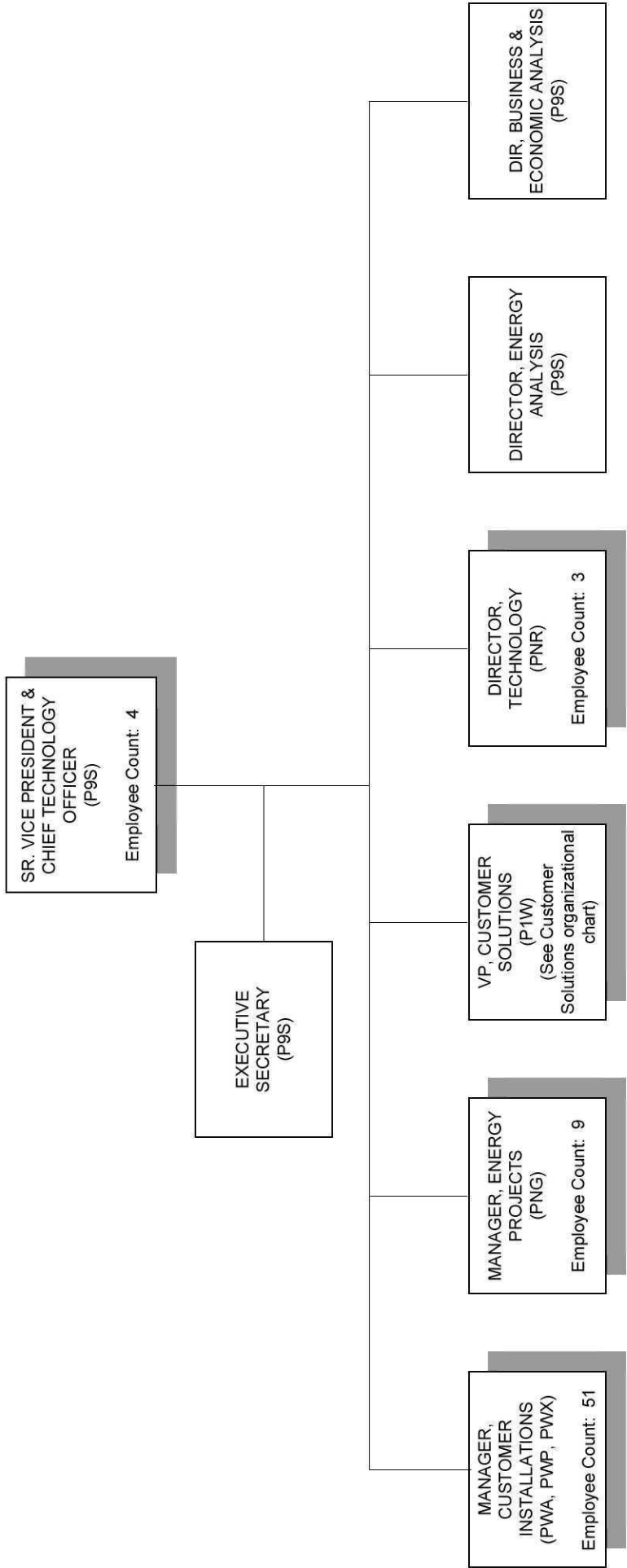


SENIOR EXECUTIVE VP AND CHIEF OPERATING OFFICER
Actual employee count as of 7/31/08



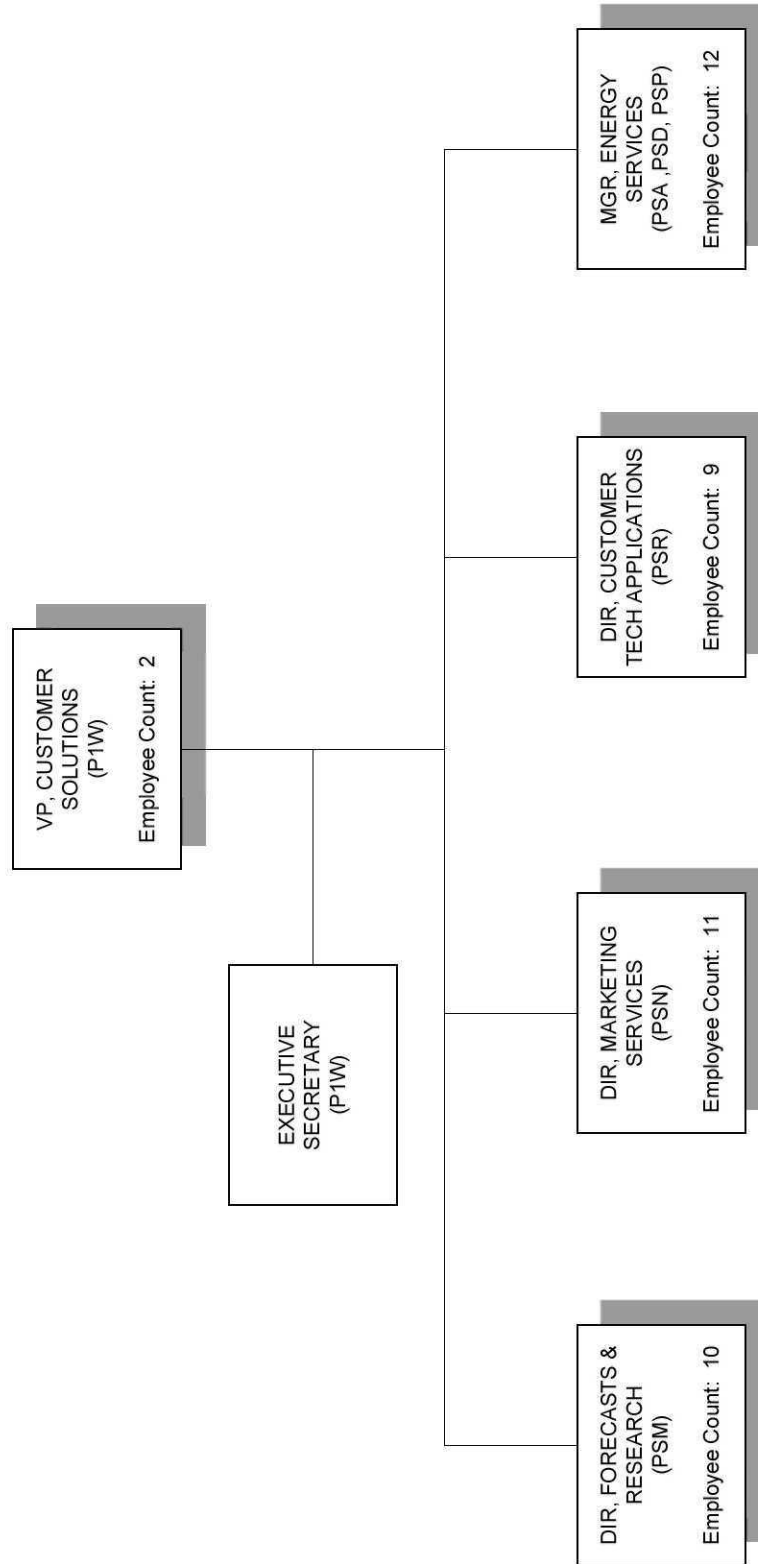
SR. VICE PRESIDENT ENERGY SOLUTIONS

Actual employee count as of 8/11/08

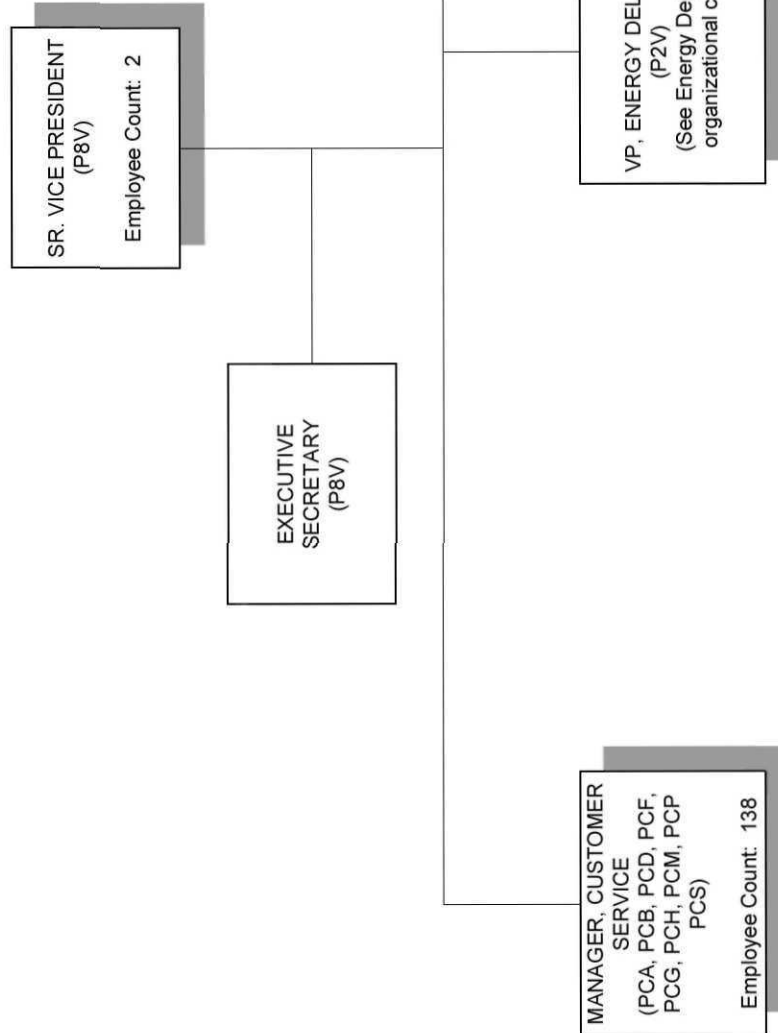


*Employee counts include interns and temporary employees on HECO payroll, but exclude employees covered under the DSM surcharge

Customer Solutions
Actual employee count as of 8/1/08

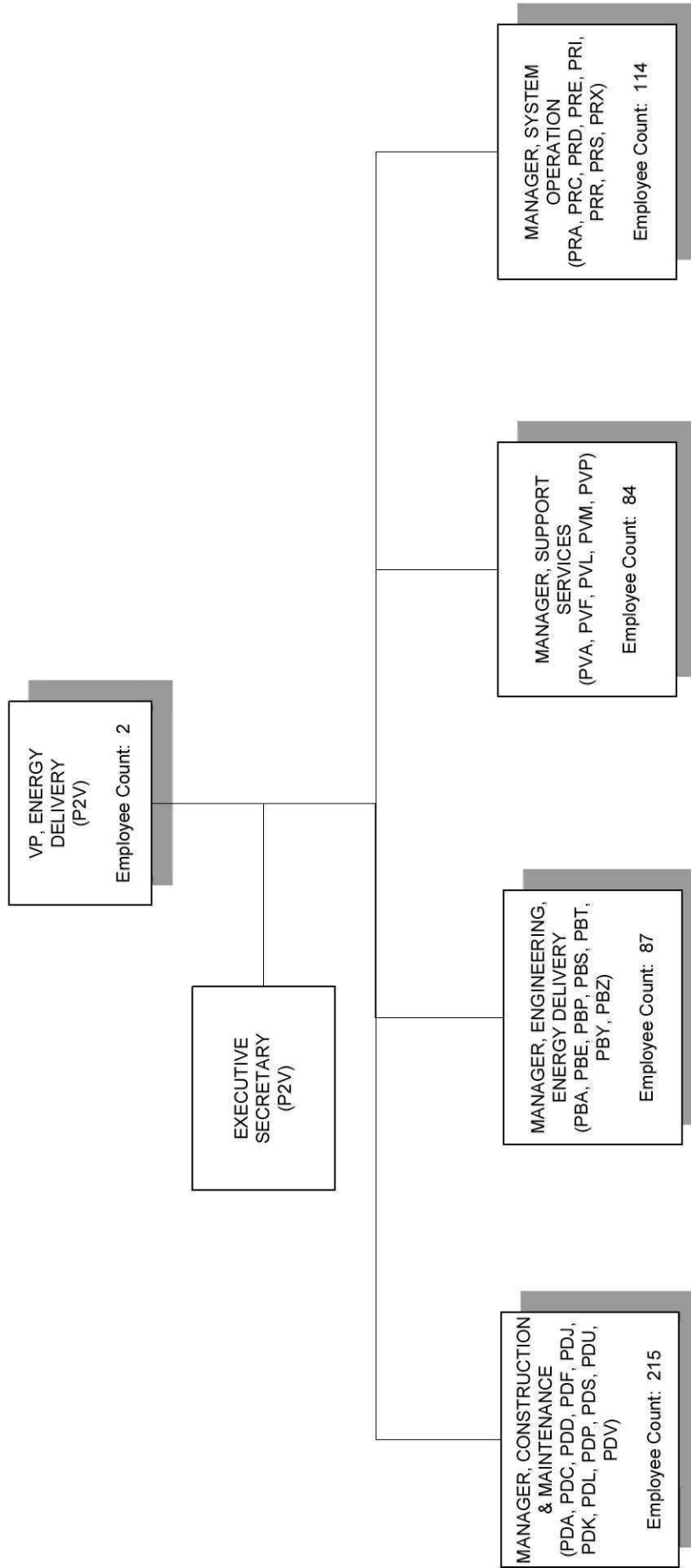


SR. VICE PRESIDENT OPERATIONS
Actual employee count as of 8/11/08



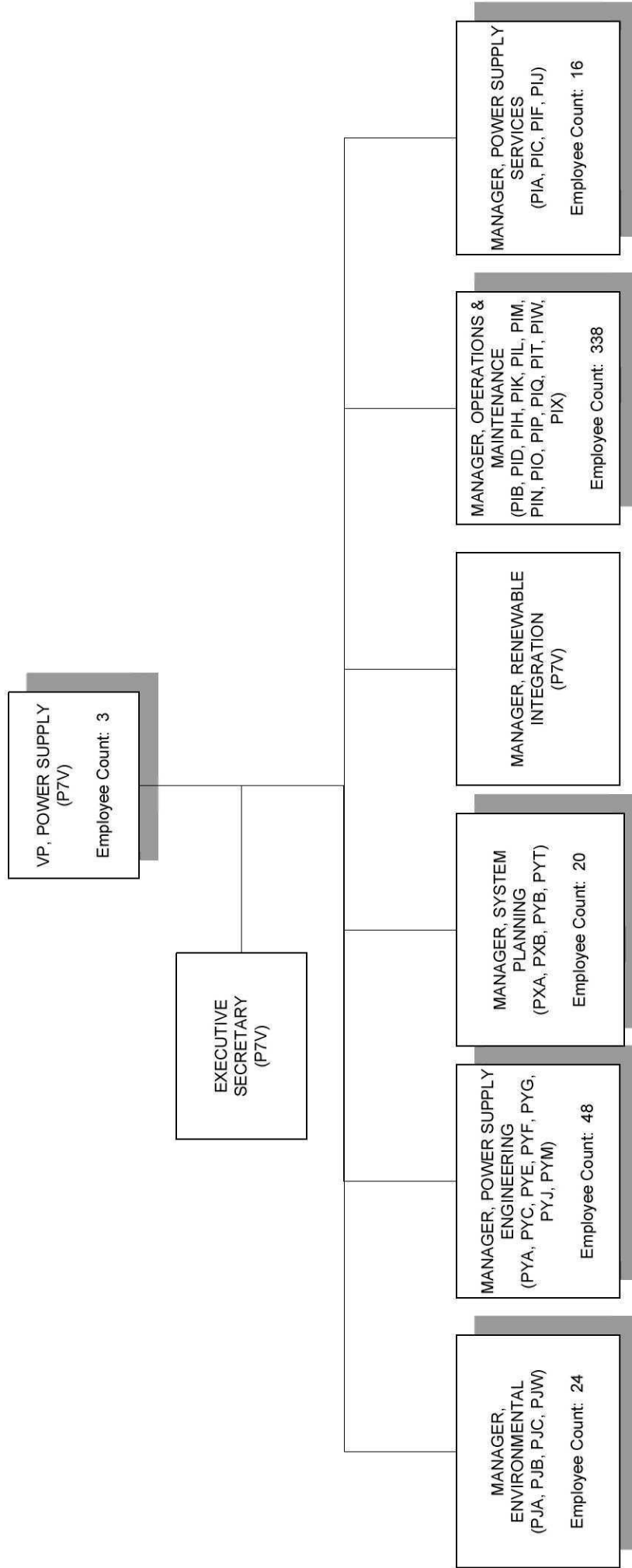
Energy Delivery

Actual employee count as of 8/11/08

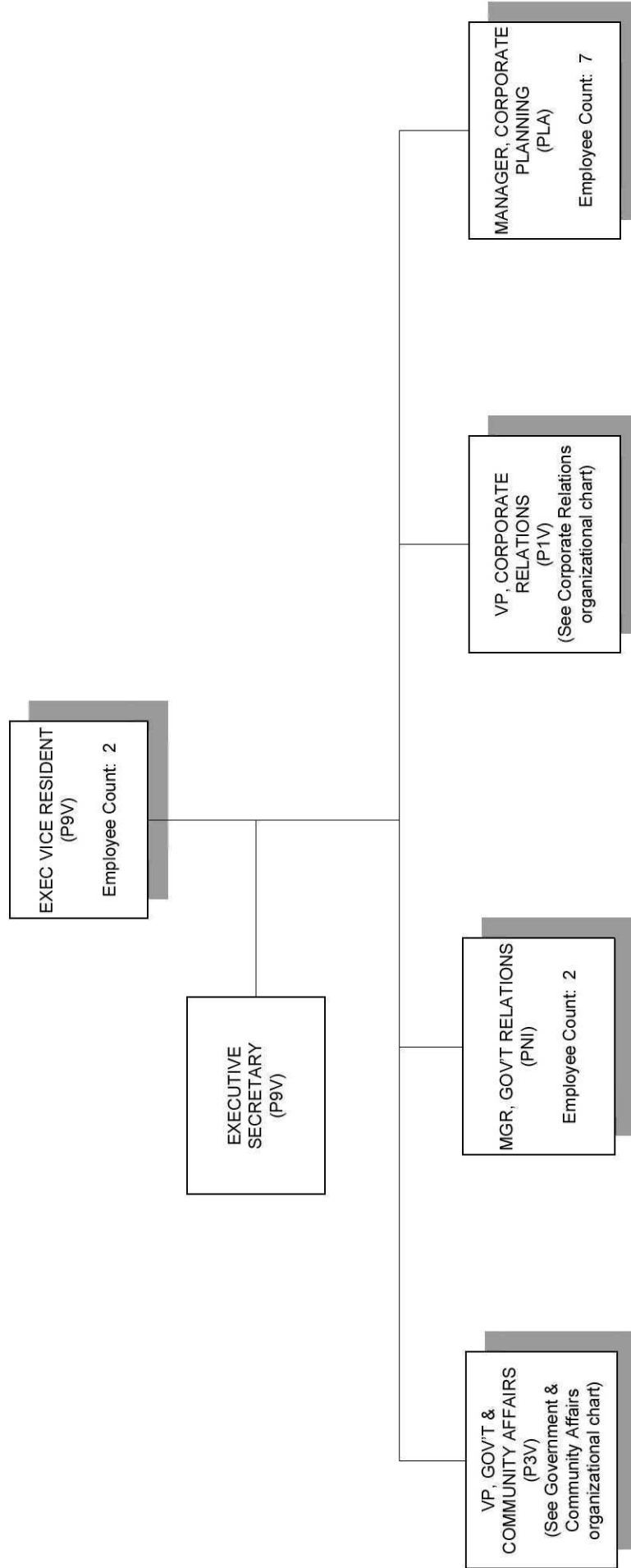


Power Supply

Actual employee count as of 8/11/08



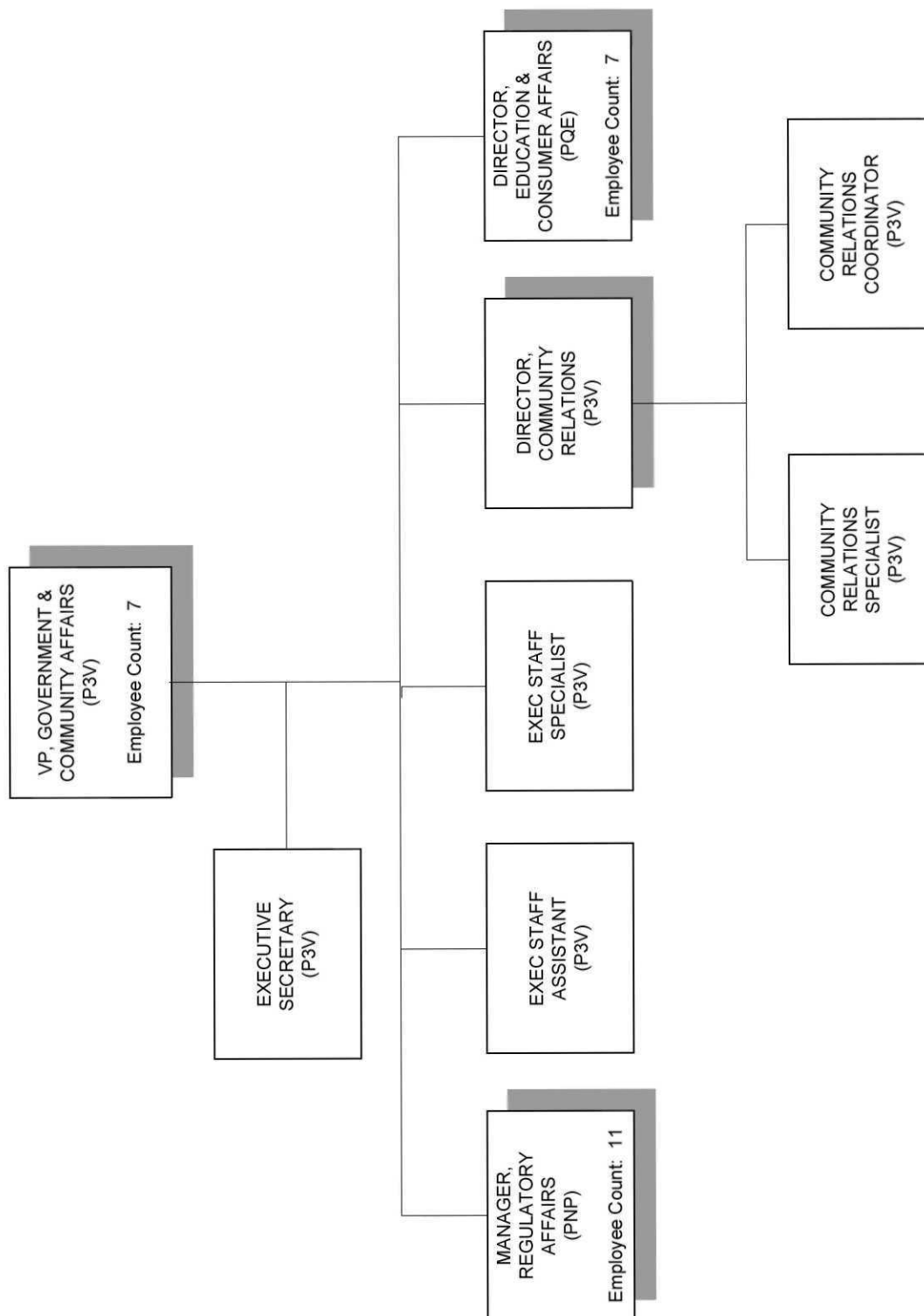
EXECUTIVE VICE PRESIDENT PUBLIC AFFAIRS
Actual employee count as of 8/11/08



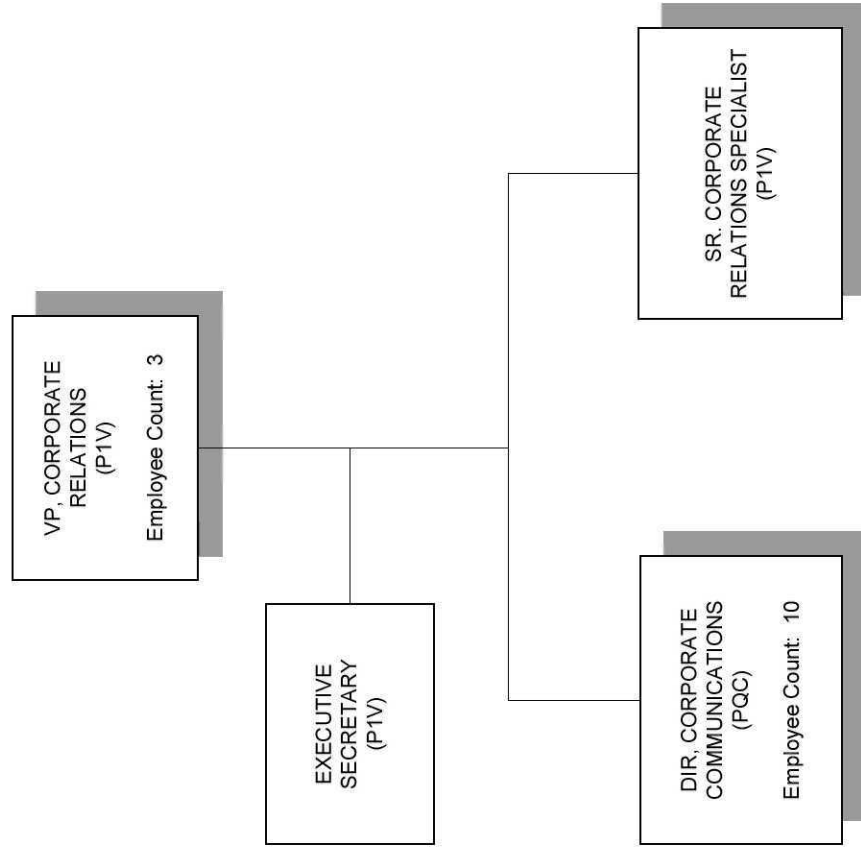
*Employee counts include interns and temporary employees on HECO payroll, but exclude employees covered under the DSM surcharge

Government & Community Affairs

Actual employee count as of 8/11/08



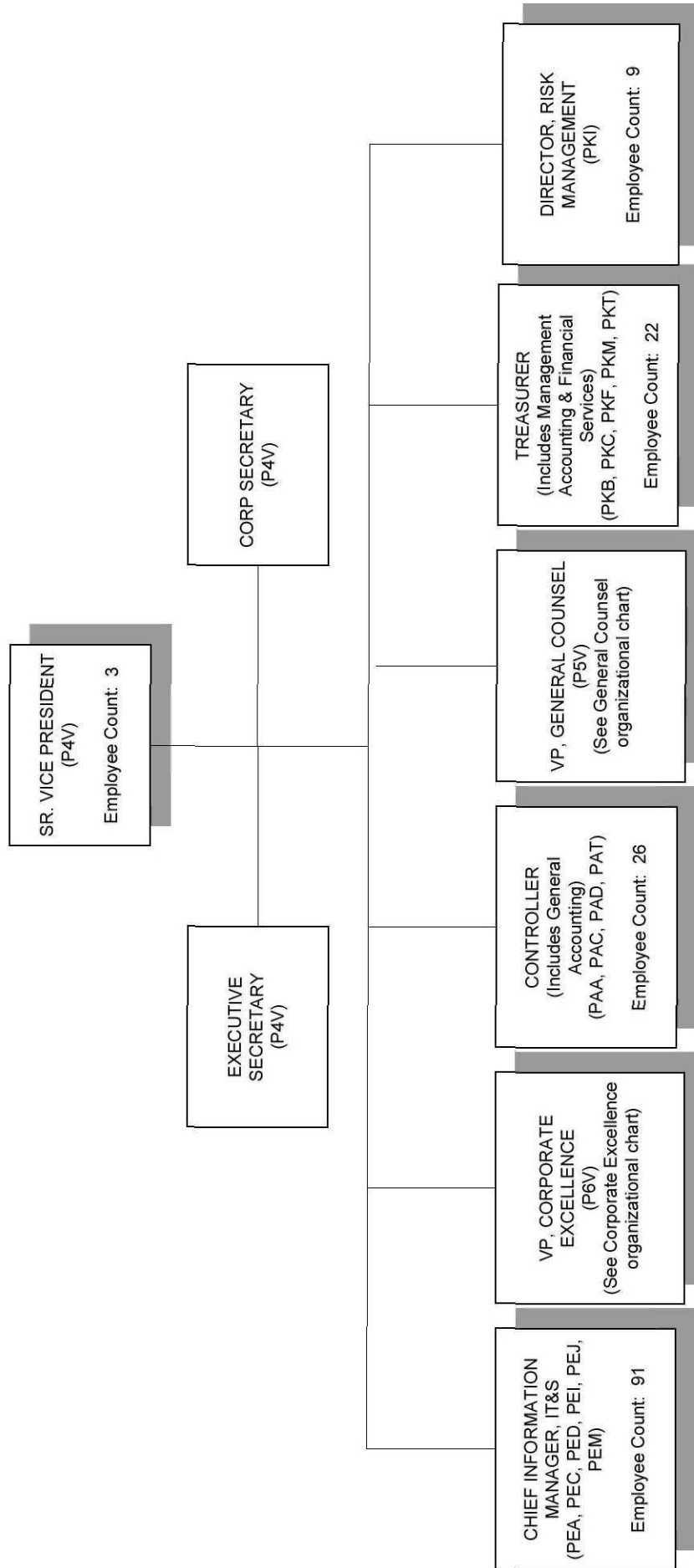
Corporate Relations
Actual employee count as of 8/11/08



*Employee counts include interns and temporary employees on HECO payroll, but exclude employees covered under the DSM surcharge

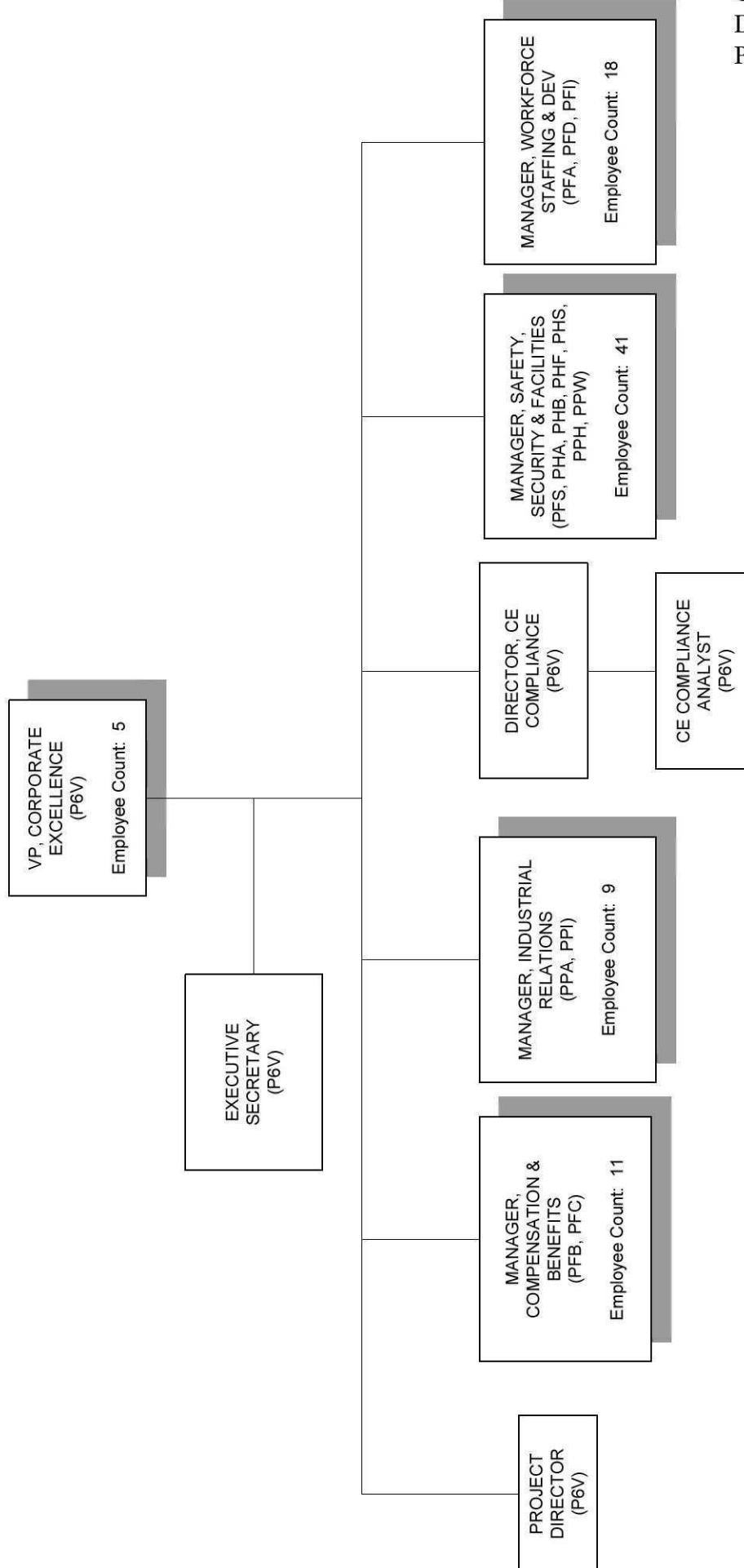
SR. VICE PRESIDENT FINANCE & ADMINISTRATION

Actual employee count as of 8/11/08



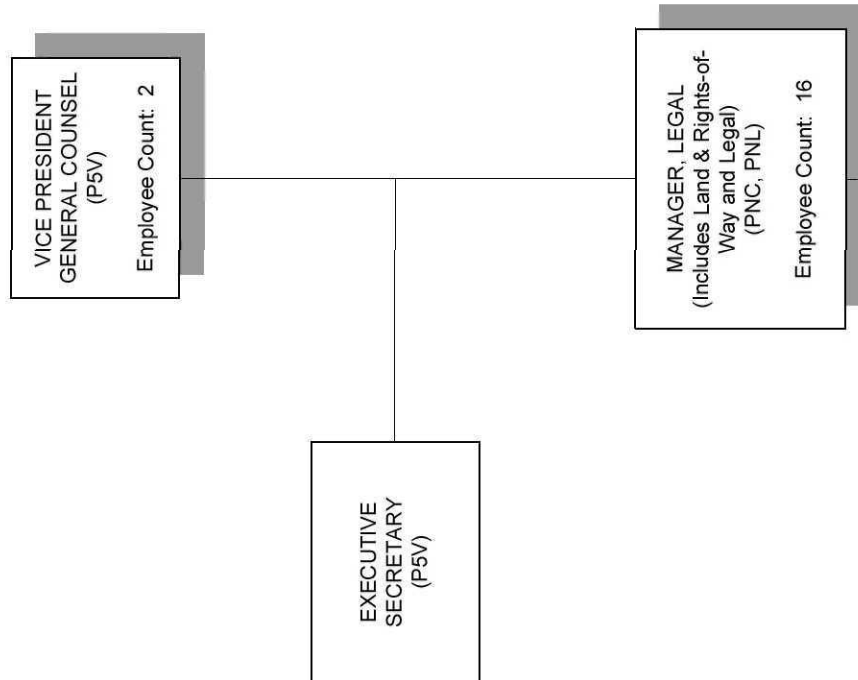
Corporate Excellence

Actual employee count as of 8/1/08



*Employee counts include interns and temporary employees on HECO payroll, but exclude employees covered under the DSM surcharge

General Counsel
Actual employee count as of 8/11/08



CA-IR-25

Provide a complete and detailed copy of the formally approved operating and capital budgets that are in place for HECO for 2008.

HECO Response:

See HECO's Response to CA-IR-27.

CA-IR-26

Please provide complete copies of the most recent available detailed budget variance reports prepared for each HECO department and cost center, comparing actual to-date 2008 financial performance to budgeted amounts and explaining the reasons for experienced budget variances.

HECO Response:

As addressed below, HECO objects to providing internally distributed reports and narrative discussions of the reasons for budget variances, on the grounds that: 1) these documents are privileged and confidential and should not be provided on public policy grounds, and 2) explanations generally would be required as to how unadjusted budget numbers relate to test year numbers to be meaningful, which would be unduly burdensome to provide.

Without waiving the foregoing objections, after a Protective Order is issued in this proceeding, HECO will provide the following attachments which contain confidential information and were prepared as part of the internal O&M expense management process:

- i. Attachment 1 showing year-to-date July 2008 O&M budget comparison report.

It is the most recently prepared year-to-date O&M expense variance report by HECO department with explanations for select variances. Information on Attachment 1 that shows forward-looking information will be redacted.

- ii. Attachment 2 showing year-to-date July 2008 O&M expense variances for HECO.

Information on Attachment 2 that is not related to O&M expenses for HECO will be redacted.

HECO objects to providing internally generated variance reports. Explanations of budget variances are communicated through various media ranging from telephone conversations, brief and informal notes, to more standard write-ups containing explanations in "bullet point" form. The explanations are intentionally brief in nature since Company personnel understand the

context behind the drivers of the variances and the Company believes that it is not cost effective to spend the time to generate elaborate variance explanations. If the Company is required to produce internally generated variance information at the time of rate cases, then the information will have to be generated in a fashion suitable for external publication, rather than in its present form used for internal management purposes. This would be unduly burdensome, as well as counter productive.

The explanations are intended solely to be a management tool, and are not required to be submitted to management in a form to be transmitted outside the Company. Were these documents subject to review in a regulatory proceeding, their candid nature and, therefore, their value would diminish significantly in the future, and HECO's internal communications would be seriously hampered.

This information request basically requests unlimited access to internal reports or documents submitted in connection with the operating budget and variances from the operating budget. The information request fails to balance the Consumer Advocate's need for this information against the Company's need to manage.

For example, the Federal Freedom of Information Act ("FFIA"), codified at 5 U.S.C. Section 552, and the Uniform Information Practices Act (modified), codified at H.R.S. Ch. 92F, contains broad disclosure requirements based on the public's interest in open government. However, even such broad disclosure acts provide exceptions from the broad disclosure requirements that are intended to permit the efficient and effective functioning of government. It is common in such acts to protect from disclosing pre-decisional agency memoranda and notes, and/or government records that, by their nature, must be confidential in order to avoid the frustration of a legitimate government function. This is similar to the "deliberative process privilege" recognized by the Pennsylvania Public Utility Commission with respect to its own

internal staff reports. See Pennsylvania Public Utility Commission v. West Penn Power Company, 73 Pa PUC 122 (July 20, 1990).

HECO also objects to disclosure of the requested information under a protective order. The value of the internal management reports will be diminished for the reasons stated above if the Company is required to provide the reports to the Consumer Advocate, even if the reports are provided pursuant to a protective order.

Providing variance to budget explanations was raised as an issue by the Consumer Advocate in MECO's 1992-1993 test year rate case, Docket No. 7000. MECO (and essentially HECO and HELCO, or the Companies) and the Consumer Advocate reached agreement in Docket No. 7000 to separate from Docket No. 7000 the Budget Preparation Process/Budget Issues, including the type and amount of information to be provided to the Consumer Advocate between rate cases. MECO and the Consumer Advocate agreed to work together outside of Docket No. 7000 to resolve the budgeting and reporting issues. As a result of the discussions to resolve the issues, among other things, the Companies agreed to provide detailed recorded data files and budget detailed data files for the link year as part of each subsequent rate case filing. (See transmittal letter dated July 14, 2008 in this proceeding indicating such information was provided to the Commission and the Consumer Advocate). In this case, HECO has provided (as part of its direct testimonies filed in the rate case) explanations of variances by activity, above a threshold, between the budget prepared for the test year and the full year actual information. (See for example HECO-WP-701, HECO-WP-901, page 2, and HECO-1201, submitted in this proceeding). Thus, HECO has provided a significant amount of information as a result of prior agreements in order for the Consumer Advocate and the Commission to determine the reasonableness of HECO's test year expenses.

**Confidential Information Deleted
Pursuant To Protective Order, Filed on**

CA-IR-26
DOCKET NO. 2008-0083
ATTACHMENTS 1-2

Attachments 1 and 2 are confidential and will be provided
after a Protective Order is issued in this proceeding.

CA-IR-27

Provide a complete and detailed copy of the formally approved long term operating and capital forecasts that are in place for HECO for 2008 and subsequent years.

HECO Response:

HECO does not prepare a long term operating budget. HECO has prepared an operating budget for 2008 and 2009 which is reflected in HECO-WP-101(A) through HECO-WP-101(I).

The latest formally approved five-year capital budget, HECO 2008 Capital Expenditures Budget, was filed with the Commission on February 29, 2008 and a copy was provided to the Consumer Advocate. (See Attachment 1 for a copy of the report.)

Hawaiian Electric Company, Inc. • PO Box 2750 • Honolulu, HI 96840



William A. Bonnet
Vice President
Government and Community Affairs

February 29, 2008

FILED
2008 FEB 29 P 3:11
PUBLIC UTILITIES
COMMISSION

The Honorable Chairman and Members of the
Hawaii Public Utilities Commission
465 South King Street, First Floor
Kekuanaoa Building
Honolulu, Hawaii 96813

Dear Commissioners:

Subject: HECO 2008 Capital Expenditures Budget

In accordance with the provisions of paragraph 2.3(g)(1) of General Order No. 7, enclosed are nine copies of Hawaiian Electric Company, Inc.'s ("HECO") 2008 Capital Expenditures Budget.¹ HECO has included (1) a brief description of each project that is expected to cost \$1 million or more for the upcoming years and each program that is expected to cost \$1 million or more annually, and a statement as to the primary reasons for the project/program, (2) an explanation of how a project/program relates to the overall operational objectives of HECO, and is consistent with HECO's Integrated Resource Plan, and (3) the estimated start and completion dates for each project.² (The start date is the date that expenditures are first charged to construction work in progress ("CWIP") and generally when allowance for funds used during construction ("AFUDC") is first applied. Prior to when costs are charged to CWIP, costs are generally charged to and accumulated in preliminary engineering. The end date is the date the project is declared used or useful.)

Also enclosed are nine copies of HECO's schedule on Property Held for Future Use, in accordance with Decision and Order No. 6275 in Docket No. 3705.

The 2008 Capital Expenditures Budget lists projects with estimated expenditures of \$1 million or more in the upcoming years. The 2008-2012 Capital Expenditures Program is HECO's projection of its capital expenditure requirements for the next five years, as of October 2007, and is subject to revision based on customer needs and HECO's continual analysis of

¹ On December 19, 2007, HECO requested an extension to March 4, 2008, to file its Capital Expenditures Budget report. On December 27, 2007, the Commission issued a letter granting HECO's request.

² This information is being provided pursuant to Decision and Order No. 21002, filed May 27, 2004, in Docket No. 03-0257.

The Hawaii Public Utilities Commission
February 29, 2008
Page 2

system requirements and costs. A supplemental list of projects with estimated expenditures of \$1 million or more in the upcoming years is also enclosed.

Also included are graphs comparing the one-year budget and five-year program to previous years.

As stated on page 17, the 2008 Capital Expenditures Budget does not include estimated costs for the Renewable Energy Infrastructure Program ("REIP") projects described by the Company in Docket No. 2007-0008 and whose construction will depend on Commission approval of the REIP. The projects themselves are not subject to approval in Docket No. 2007-0008. The Company will file applications, as required, for each of these projects. In December 2007, the Commission issued a decision and order approving the stipulated framework, with modifications, but deferred the incentive framework, including the proposed renewable energy infrastructure surcharge, to a new generic docket (i.e., Docket No. 2007-0416). The procedural schedule for the new generic docket has been approved, and will include public hearings in May 2008.

Sincerely,



Enclosures

cc: Division of Consumer Advocacy w/enclosures (2)



Hawaiian Electric Company, Inc.

2008
Capital Expenditures Budget

December 10, 2007

Hawaiian Electric Company, Inc.
2008 Capital Expenditures Budget
December 10, 2007

	Page Number
Summary by Process Area	2
List of Projects	
Energy Delivery	3
Energy Solutions	7
Power Supply	9
Other	15
Graphs of Annual and Five-Year Capital Expenditures	16
Five-Year Summary with Assumptions	17

Hawaiian Electric Company, Inc.
2008 Capital Expenditures Budget
December 10, 2007

(\$ in Millions)

	Budget		
	Year	2009-	
	2008	2012	Total
<u>Summary by Process Area</u>			
Energy Delivery	45	168	213
Energy Solutions	21	114	135
Power Supply	133	258	391
Other	5	12	17
<hr/>			
Total Capital Expenditures	204	552	756

Hawaiian Electric Company, Inc.
2008 Capital Expenditures Budget
December 10, 2007

(\$ in Thousands)

	Start Date	End Date	Prior Years	Budget Year 2008	2009- 2012	Future Years	Total
<u>List of Projects</u>							
Energy Delivery							
East Oahu Transmission Project							
Install various underground 46kV circuits in the Honolulu area. In addition, install 138kV to 46kV transformers at Kamoku and Archer Substations, and make minor modifications at various distribution substations in the Honolulu area. The project is needed to address various transmission system problems in east Oahu. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Jul-91	***	32,868	4,638	32,995	0	70,501
New Dispatch Center (includes new Energy Management System (EMS))							
Construct new Dispatch Building and replace current EMS with state-of-the-art system to improve the security and reliability of HECO's System Operation Dispatch Center. The Dispatch Center building and associated equipment and the EMS were placed in service. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Dec-02	Dec-07	27,279	135	0	0	27,414
UH West Oahu Substation							
Build a substation to serve the loads generated by the proposed University of Hawaii West Oahu (UHWO) campus and other new proposed developments in the area. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Oct-07	Jul-10	122	1,105	25,495	0	26,722
Aina Haina Cable Replacement							
Replace direct buried cables in the Aina Haina area. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Jan-09	Sep-16	0	0	3,809	15,528	19,337

*** The first phase is currently projected to be completed in 2010 and the completion date of the second phase is being evaluated.

Hawaiian Electric Company, Inc.
2008 Capital Expenditures Budget
December 10, 2007

(\$ in Thousands)							
	Start Date	End Date	Prior Years	Budget Year 2008	2009- 2012	Future Years	Total
Kakaako Makai 25kV Ductline							
Construct new ductlines along Ala Moana Boulevard between Kamakee Street and Ward Avenue and along Nimitz Highway between Bethel Street and Forrest Avenue. Install 25kV electrical cables and equipment to serve Kakaako Makai from Iwilei and Kewalo Substations. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Jun-03	Jul-10	317	0	11,024	0	11,341
Pukele Transformer Replacement							
Replace transformer in Pukele Substation. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Aug-07	Jan-11	7	54	4,668	0	4,729
Whitmore Substation							
Build a substation in the Wahiawa area to serve the new load for the Hawaii Regional Security Operations Center. The project supports HECO's strategies related to Customer Partnerships.	Aug-07	Jul-09	368	1,530	2,751	0	4,649
KoOlina 46kV Substation							
Build a system substation in the KoOlina area to serve new load. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Apr-04	Jan-08	4,269	299	0	0	4,568
Beckoning Point Substation							
Build a dedicated substation on Beckoning Point to serve the new loads at the PACFLT Submarine Drive-In Magnetic Silencing Facility site. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Mar-08	Jan-10	75	189	3,921	0	4,185
Waikiki Rehabilitation Phase 2							
Inspect the following 12kV circuits: DeRussey, Waikiki 2, and Waikiki 5. Replace existing deteriorated cables with covered polyethylene insulated concentric neutral (PEICN) cables. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Jan-11	Dec-12	0	0	2,647	0	2,647

Hawaiian Electric Company, Inc.
2008 Capital Expenditures Budget
December 10, 2007

(\$ in Thousands)

	Start Date	End Date	Prior Years	Budget Year 2008	2009- 2012	Future Years	Total
Ala Wai Canal 46kV Underground Relocation Relocate the Pukele 4 and Pukele 5 46kV feeders crossing the Ala Wai Canal to a depth that will not interfere with future canal dredging activity to increase and maintain the reliability of the Waikiki Substation. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Jan-08	Jul-09	0	462	2,151	0	2,613
Barbers Point Tank Farm Transformer Install a new transformer at the Barbers Point Tank Farm. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Nov-07	Apr-09	1	848	1,340	0	2,189
Waikiki Rehabilitation Phase 3 <i>Inspect the following 12kV circuits: Diamond Head, Kapahulu 1, Kapahulu 4, Sheraton 1, and Sheraton 2. Replace existing deteriorated cables with covered polyethylene insulated concentric neutral (PEICN) cables. The project supports HECO's strategies related to Achieve a Preferred Energy Future.</i>	Nov-06	Dec-08	348	1,665	0	0	2,013
Pukele Civil Structural Architectural Infrastructure Prepare Pukele Substation for possible future replacements of transformers. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Aug-07	Mar-09	101	1,439	473	0	2,013
Mikilua Substation Transformer #3 T&D Work Install new 10MVA 46-12kV transformer and associated 15kV switchgear at Mikilua Substation. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Jul-07	Dec-08	17	1,442	113	0	1,572
Maunalani Heights Cable Replacement Replace direct buried cables in the Maunalani Heights area. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	May-06	Nov-08	180	1,325	12	0	1,517
Iwilei 46kV Substation Control House Upgrade Upgrade obsolete relay and wiring in the Iwilei 46kV Control House. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Jun-11	Mar-12	0	0	1,420	0	1,420

Hawaiian Electric Company, Inc.
2008 Capital Expenditures Budget
December 10, 2007

(\$ in Thousands)

	Start Date	End Date	Prior Years	Budget Year 2008	2009- 2012	Future Years	Total
Waiau Ewa Nui Fiber Optic Replacement Replace the fiber optic strands between the Waiau Power Plant and the Ewa Nui Substation. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Jan-06	Mar-08	351	939	0	0	1,290
Corrective Miscellaneous Cable Replacement Corrective replacement of underground primary, secondary, service and transmission cables. The program supports HECO's strategies related to Achieve a Preferred Energy Future.	On-going program			5,189	13,885		19,074
Corrective Overhead Distribution Replacement Corrective replacement of overhead poles, fixtures, and aerial cables that have been identified as broken, rusted, corroded, rotten or damaged. The program supports HECO's strategies related to Achieve a Preferred Energy Future.	On-going program			2,470	7,518		9,988
Sub-Total				23,729	114,222		
Other Projects and Programs, net Includes projects with total expenditures of less than \$1,000,000 and programs with annual expenditures of less than \$1,000,000.				21,271	53,778		
Total Energy Delivery				45,000	168,000		

Hawaiian Electric Company, Inc.
2008 Capital Expenditures Budget
December 10, 2007

(\$ in Thousands)

	Start Date	End Date	Prior Years	Budget Year 2008	2009- 2012	Future Years	Total
Energy Solutions							
Department of Transportation Airport Dispatchable Standby Generation							
Install paralleling equipment to allow utility dispatch of customer-owned generators at site to be determined. This project supports HECO's strategies related to Achieve a Preferred Energy Future.	Nov-08	Oct-09	0	243	3,854	0	4,097
2012 Distributed Generation							
Install paralleling equipment to allow utility dispatch of customer-owned generators at a site to be determined. This project supports HECO's strategies related to Achieve a Preferred Energy Future.	Jan-12	Dec-12	0	0	3,063	0	3,063
2011 Distributed Generation							
Install paralleling equipment to allow utility dispatch of customer-owned generators at a site to be determined. This project supports HECO's strategies related to Achieve a Preferred Energy Future.	Jan-11	Dec-11	0	0	3,017	0	3,017
2010 Distributed Generation							
Install paralleling equipment to allow utility dispatch of customer-owned generators at a site to be determined. This project supports HECO's strategies related to Achieve a Preferred Energy Future.	Jan-10	Dec-10	0	0	2,969	0	2,969
Queens Dispatchable Standby Generation							
Install paralleling equipment to allow utility dispatch of customer-owned generators. This project supports HECO's strategies related to Achieve a Preferred Energy Future.	Sep-08	Aug-09	0	474	1,494	0	1,968
Miscellaneous Underground Service & Extensions							
Provide underground service to new and existing customers. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	On-going program			11,645	48,592		60,237
Transformer and Equipment Purchase/Service							
Purchase and provide overhead and padmount distribution transformers. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	On-going program			4,305	18,377		22,682

Hawaiian Electric Company, Inc.
2008 Capital Expenditures Budget
December 10, 2007

(\$ in Thousands)

	Start Date	End Date	Prior Years	Budget Year 2008	2009- 2012	Future Years	Total
Miscellaneous Overhead Service and Extensions							
Provide overhead service to new and existing customers. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	On-going program			1,309	5,778		7,087
Minor Overhead Distribution Additions							
Replacement of overhead distribution poles due to rot and termite damage. Reconductor and construct various 12 & 4kV lines and minor distribution system voltage adjustments. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	On-going program			1,263	5,736		6,999
Meters and Metering Equipment							
Purchase, test and install meters, solid state recorders and associated equipment, instrument transformers, phase shifting transformers, test blocks and wire. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	On-going program			1,008	4,217		5,225
Sub-Total				20,247	97,097		
Other Projects and Programs, net							
Includes projects with total expenditures of less than \$1,000,000 and programs with annual expenditures of less than \$1,000,000.				753	16,903		
Total Energy Solutions				21,000	114,000		

Hawaiian Electric Company, Inc.
2008 Capital Expenditures Budget
December 10, 2007

(\$ in Thousands)

	Start Date	End Date	Prior Years	Budget Year 2008	2009- 2012	Future Years	Total
Power Supply							
Campbell Industrial Park Generating Station and Transmission Line							
Construct a nominal 100MW simple cycle combustion turbine unit at HECO's Barbers Point Tank Farm and install a transmission line from the AES Substation to the CEIP substation to maintain system reliability and prevent existing transmission line overloads. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Jun-04	Jul-09	24,183	102,819	37,461	0	164,463
Parallel Plan Unit and Substation							
Construct a nominal 100MW simple cycle combustion turbine unit at HECO's Barbers Point Tank Farm and install associated substation equipment at AES Substation to meet forecasted load growth in accordance with the Competitive Bidding framework. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Jan-08	Dec-10	0	5,000	106,000	0	111,000
Kahe Reverse Osmosis Water Pipeline							
Construct a pipeline to convey reverse osmosis water from the Board of Water Supply water treatment facility at Honouliuli to Kahe. This project is part of the community benefits package related to the CIP Generating Station and Transmission Line project. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Jul-06	Aug-09	605	2,221	4,699	0	7,525
Kahe Unit 1 Condenser Refurbishment							
Replace deteriorated tubes and tubesheets in condenser. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Nov-04	Jul-12	62	5	4,861	49	4,977
Waiau Unit 8 Boiler Controls Upgrade							
Replace the obsolete boiler control system with a microprocessor-based system. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Jan-08	Aug-10	0	0	4,068	0	4,068
Waiau Unit 7 Boiler Controls Upgrade							
Replace the obsolete boiler control system with a microprocessor-based system. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Oct-04	Oct-11	56	0	3,936	0	3,992

Hawaiian Electric Company, Inc.
2008 Capital Expenditures Budget
December 10, 2007

(\$ in Thousands)

	Start Date	End Date	Prior Years	Budget Year 2008	2009- 2012	Future Years	Total
Kahe Wastewater Treatment Facility Sludge Drying Improvement Install a system to dry the sludge at Kahe Power Plant. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Jun-10	Dec-11	0	1	1,195	1,524	2,720
Waiau Unit 8 Main Transformer Replacement Replace deteriorated transformer. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Aug-08	Aug-10	5	228	2,457	0	2,690
Barbers Point Tank 132 Improvement Replace the existing roof insulation system and install a tank mixer to enhance blending capability. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Dec-11	Dec-12	0	0	2,394	0	2,394
Barbers Point Tank 133 Improvement Replace the existing roof insulation system and install a tank mixer to enhance blending capability. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Dec-10	Dec-11	0	0	2,276	0	2,276
Kahe Discharge Structure Reinforcement Retrofit and strengthen the existing Kahe cooling water discharge structure to withstand waves larger than those considered in the original design. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Oct-04	Dec-12	607	0	1,714	0	2,321
Waiau Unit 7 Main Transformer Replacement Replace deteriorated transformer. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Oct-06	Aug-08	1,862	243	0	0	2,105
Process Parameter Monitor Install additional instrumentation to the DCS/Process Information systems on the Kahe, Waiau and Honolulu generating units to monitor on a real-time basis the critical components of the units. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Jul-04	Dec-12	1,013	1	882	0	1,896

**Hawaiian Electric Company, Inc.
2008 Capital Expenditures Budget
December 10, 2007**

(\$ in Thousands)

	Start Date	End Date	Prior Years	Budget Year 2008	2009- 2012	Future Years	Total
Waiau Feedwater Heater Instrumentation Replace the instrumentation on all feedwater heaters associated with the Waiau Power Plant. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	May-07	Dec-12	3	0	1,852	1	1,856
Waiau Unit 9 Inlet Air Filter Replace the existing air intake and structure with a new filter house structure. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	May-06	Aug-12	49	0	1,766	0	1,815
Kahe Feedwater Heater Pressure/Temperature Instrumentation Replace the existing pressure and temperature instrumentation on Kahe units 1-6 with upgraded, electronic transmitters and gauges. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Mar-05	Dec-12	500	0	1,239	1	1,740
Waiau Unit 3 Condenser Refurbishment Replace the deteriorated tubesheet and tubes in the condenser. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Jun-11	Jun-13	0	0	1,727	0	1,727
Waiau Unit 10 Inlet Air Filter Replace the existing air intake and structure with a new filter house structure. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Jun-06	Nov-09	57	27	1,594	0	1,678
Kahe Unit 5 Turbine Controls Upgrade Replace the obsolete turbine control system with a microprocessor-based system. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Jan-11	Mar-12	1	0	1,582	0	1,583
Kahe Unit 4 Secondary Superheater Element Replacement Replace the secondary superheater section of the boiler. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Jun-09	Nov-10	0	0	1,579	0	1,579
Waiau Unit 6 Main Condenser Refurbishment Replace the deteriorated tubesheet and tubes in the condenser. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Jun-08	Jan-10	0	677	827	0	1,504

Hawaiian Electric Company, Inc.
2008 Capital Expenditures Budget
December 10, 2007

(\$ in Thousands)

	Start Date	End Date	Prior Years	Budget Year 2008	2009- 2012	Future Years	Total
Waiau Unit 3 Secondary Superheater Element Replacement Replace the secondary superheater section of the boiler. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Jun-08	Sep-09	0	8	1,487	0	1,495
Waiau 3 & 4 Circulating Water Sheet Pile Upgrade Replace existing steel sheet piles. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Jan-06	Dec-09	118	23	647	680	1,468
Kahe Unit 6 Turbine Controls Upgrade Replace the obsolete turbine control system with a microprocessor-based system. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Feb-12	Jun-13	0	0	1,465	0	1,465
Honolulu Unit 8 Main Transformer Replacement Replace deteriorated transformer. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	May-07	Jun-08	25	1,439	0	0	1,464
Waiau 1 & 2 Administration Building Reroof Upgrade the roof deck of the Waiau 1 & 2 Administration Building. The project supports HECO's strategies related to Corporate Culture.	Jan-06	Dec-11	6	0	585	772	1,363
Kahe Motor Part Wash Enclosure Construct a building and workspace to be used to wash down various motor parts during repair/maintenance. The project supports HECO's strategies related to Community Commitment.	Jan-06	Dec-11	17	0	553	735	1,305
Waiau Waste Water Treatment Facility Filter Press Install a plate filter press for the Waiau Waste Water Treatment Facility near the batch tanks. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Nov-07	Jul-08	80	1,204	5	0	1,289
Honolulu Unit 8 Volt Regulator/Exciter Replacement Install a new microprocessor based compound-source static exciter and voltage regulator. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Sep-07	Jun-08	324	806	0	0	1,130

Hawaiian Electric Company, Inc.
2008 Capital Expenditures Budget
December 10, 2007

(\$ in Thousands)

	Start Date	End Date	Prior Years	Budget Year 2008	2009- 2012	Future Years	Total
Waiau 7 Voltage Regulator/Exciter Replacement Install a new microprocessor based compound-source static exciter and voltage regulator. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Jan-10	Oct-11	0	0	1,128	0	1,128
Waiau 7 Annunciator Replacement Replace the existing annunciator system. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Jul-06	Oct-11	128	11	978	0	1,117
Kahe Parking Lot Addition Construction a new parking area and security fencing for the Kahe Station. The project supports HECO's strategies related to Corporate Culture.	Jan-06	Jun-11	58	0	458	590	1,106
Honolulu Unit 8 Secondary Superheater Element Replacement Replace the secondary superheater section of the boiler. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Dec-11	Dec-12	0	0	1,103	0	1,103
Waiau Unit 5 Exciter/Regulator Replacement Replace exciter and voltage regulator with a microprocessor-based static exciter and voltage regulator. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Jun-07	Dec-11	124	10	969	0	1,103
Waiau Pond Sheetpiling Replace approximately 500 linear feet of wood pole piles with new steel sheet piles. The project supports HECO's strategies related to Community Commitment.	Jan-06	Dec-12	307	0	787	0	1,094
Kahe Unit 4 Turbine Controls Upgrade Replace the obsolete turbine control system with a microprocessor-based system. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Jun-12	Dec-13	0	0	91	1,033	1,124
Waiau Unit 4 Exciter/Regulator Replacement Replace exciter and voltage regulator with a microprocessor-based static exciter and voltage regulator. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Aug-05	Aug-06	1,090	2	0	0	1,092

Hawaiian Electric Company, Inc.
2008 Capital Expenditures Budget
December 10, 2007

(\$ in Thousands)							
	Start Date	End Date	Prior Years	Budget Year 2008	2009- 2012	Future Years	Total
Waiau Unit 6 Exciter/Regulator Replacement Replace exciter and voltage regulator with a microprocessor-based static exciter and voltage regulator. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Jan-09	Jan-10	0	0	1,082	0	1,082
Kahe Unit 1 Excitation System Replace the existing rotation exciter and mag-amp voltage regulator with a compound-source static excitation system. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Jun-06	Jun-09	12	24	1,024	0	1,060
Waiau Unit 8 Exciter/Regulator Replacement Replace exciter and voltage regulator with a microprocessor-based static exciter and voltage regulator. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Jun-07	Aug-08	7	1,023	0	0	1,030
Waiau Unit 3 Main Steam Replacement Replace the main steam piping. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Sep-08	Sep-09	0	7	1,008	0	1,015
Kahe Unit 2 Excitation System Replace the existing rotation exciter and mag-amp voltage regulator with a compound-source static excitation system. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Jun-07	Oct-08	7	998	1	0	1,006
Emergency Power Plant Additions Miscellaneous power plant additions, each under \$100,000, either purchased or installed for the Honolulu, Waiau or Kahe Station. The project supports HECO's strategies related to Achieve a Preferred Energy Future.				2,216	9,547		11,763
Sub-Total				118,993	207,027		
Other Projects and Programs, net Includes projects with total expenditures of less than \$1,000,000 and programs with annual expenditures of less than \$1,000,000.				14,007	50,973		
Total Power Supply				133,000	258,000		

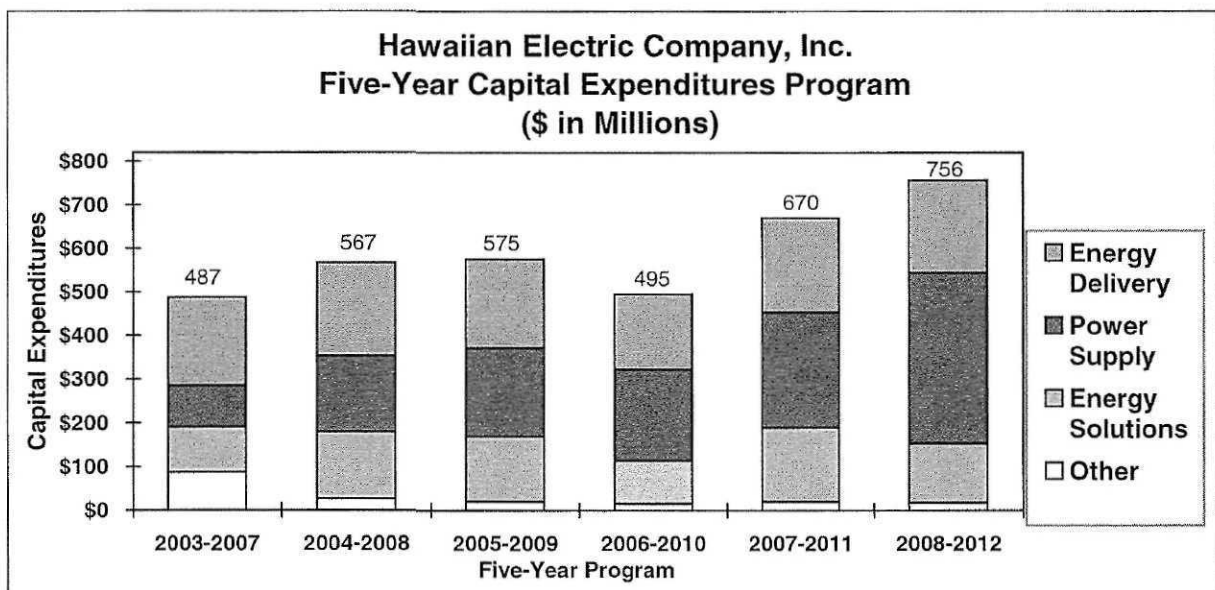
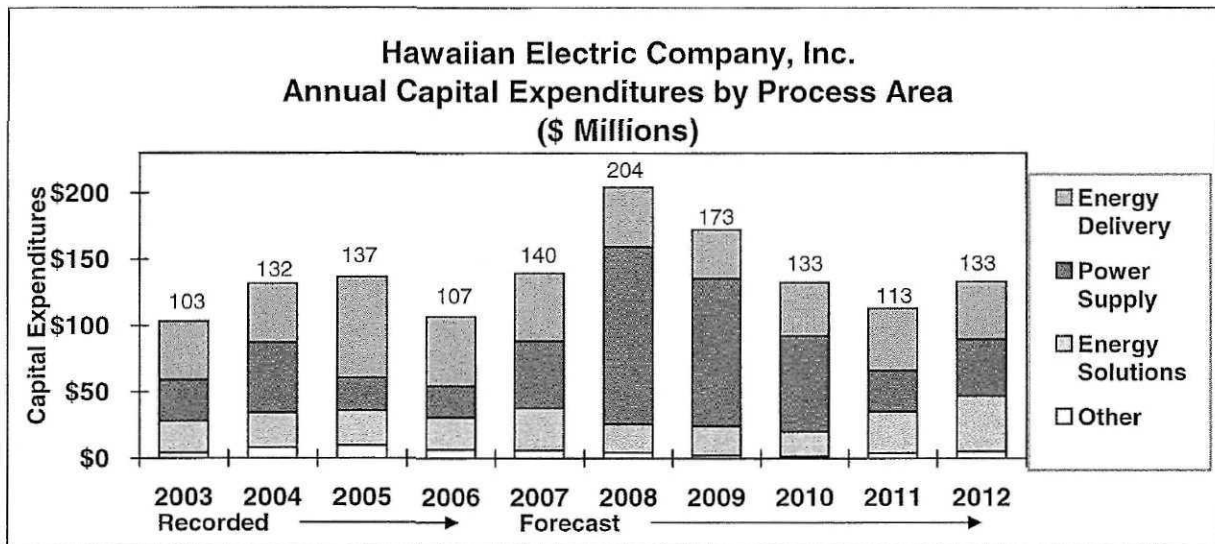
Hawaiian Electric Company, Inc.
2008 Capital Expenditures Budget
December 10, 2007

(\$ in Thousands)

	Start Date	End Date	Prior Years	Budget Year 2008	2009- 2012	Future Years	Total
Other							
Archer Substation Chiller Change							
Replace two air conditioner chiller plants. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Oct-07	Jan-08	1,576	232	0	0	1,808
Sub-Total				232	0		
Other Projects and Programs, net							
Includes projects with total expenditures of less than \$1,000,000 and programs with annual expenditures of less than \$1,000,000.				4,768	12,000		
Total Other				5,000	12,000		
TOTAL CAPITAL EXPENDITURES				204,000	552,000		

Hawaiian Electric Company, Inc.
2008 Capital Expenditures Budget
December 10, 2007

Graphs of Annual and Five-Year Capital Expenditures



Hawaiian Electric Company, Inc.
2008 Capital Expenditures Budget
December 10, 2007

Five-Year Summary

2008-2012 Capital Expenditures Program

(\$ in Millions)

	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>
Energy Delivery	45	37	40	47	44
Energy Solutions	21	22	19	31	42
Power Supply	133	111	72	31	43
Other	5	2	2	4	5
Total Capital Expenditures	204	173	133	113	133

Totals may not add due to rounding

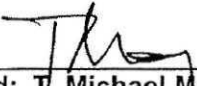
Total Capital Expenditures 2008-2012 Inclusive: \$756 million*

* Does not include estimated costs for the Renewable Energy Infrastructure Program Projects. The proposed schedule and costs for the Projects are preliminary and subject to change; and subject to PUC approval of the Renewable Energy Infrastructure Program as described in the Stipulation and Joint RPS Framework, Exhibits A, B and C filed on October 12, 2007, Docket No. 2007-0008. See Exhibit C of the Stipulation and Joint RPS Framework for the HECO Companies' Description of Their Near-Term Renewable Energy Infrastructure Projects Under the Temporary Renewable Energy Infrastructure Surcharge.

General Notes:

This budget is based on the September 2007 Sales and Peak update.

		<i>% increase</i>			
	2008	2009	2010	2011	2012
Peak Demand	0.3	0.8	1.3	1.0	2.6
Sales	0.7	0.7	1.4	1.1	2.3

Approved: 
T. Michael May
President and CEO

11/27/07
Date

Hawaiian Electric Company, Inc.

2007
Property Held for Future Use

December 31, 2007

Hawaiian Electric Company, Inc.

Schedule of Property Held for Future Use - 2007

Property Name	Tax Map Key	Acquisition Date	Purchase Price	Service Date
Kalaeloa Barbers Point Harbor Pipeline	9-1-14:08	1991	\$517,276.59	---
Campbell Industrial Park Generating Station	9-1-26:39	2007	\$1,261,761.49	July 2009
Campbell Industrial Park Generating Station	9-1-26:38	2007	\$1,809,875.14	Post 2009
Kapolei Substation	9-1-16:90	2006	\$3,606.00	2011

Status of Property Held for Future Use

Kalaeloa-Barbers Point Harbor Pipeline

During the construction of the State's Kalaeloa-Barbers Point Harbor, HECO was provided the opportunity to install fuel pipeline and manifold equipment to establish the future capability of shipping fuel through this deep draft harbor should the need arise. Currently, this pipeline is not in use because HECO continues to receive and ship its fuels under contracts with Chevron and Tesoro.

Campbell Industrial Park Generating Station

HECO assumed ownership of two parcels from HRPT Properties Trust in 2007. The first is a 44-foot wide parcel of approximately two acres running between HECO's Barbers Point Tank Farm and HPower that is needed to accommodate HECO's proposed new generating unit and auxiliaries. The second is a 1.76 acre property between Hanua Street and HECO's existing AES Substation that will allow for expansion of the AES Substation to accommodate future additional capacity in Campbell Industrial Park. Construction of facilities on the first parcel is estimated to begin in 2008 and is expected to be completed in July 2009. The second parcel will remain in Property Held for Future Use until future additional capacity is added in the Campbell Industrial Park area.

Kapolei Substation

This parcel was dedicated to HECO by the Housing and Community Development Corporation of Hawaii to provide electrical infrastructure for the Kapolei East area. HECO's purchase price was its site investigation and closing costs. Installation of a distribution substation is currently scheduled for 2011 to accommodate loads in the Kapolei East area, such as the proposed Kapolei Mall and Department of Hawaiian Home Land's residential developments.

Hawaiian Electric Company, Inc.

2008
Supplemental List of Projects

March 3, 2008

**Hawaiian Electric Company, Inc.
2008 Capital Expenditures Budget**

(\$ in Thousands)

	<u>Start Date</u>	<u>End Date</u>	<u>Prior Years</u>	<u>Budget Year 2008</u>	<u>2009 2010</u>	<u>Future Years</u>	<u>Total</u>
<u>Supplemental List of Projects</u>							
Pukele Transformer Replacement 2 Replace transformer #2 in Pukele Substation. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Jan-12	Jan-15	0	0	54	7,675	7,729
Barbers Point Fuel Oil Tank 131 Floor Renovation Renovate the bottom of Barbers Point Fuel Oil Tank 131. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Nov-07	Nov-08	707	3,462	0	0	4,169
Spare 80mva Transformer #1 Replace the system spare 138-46kV, 48/80 MVA, transmission substation transformer. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Jan-08	Aug-09	0	32	2,574	0	2,606
Barbers Point Tank Farm Transformer #2 Install a new 10/12.5 mva, 46-12.47 kV transformer and related equipment. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Nov-07	Apr-09	67	846	1,282	0	2,195
Spare 48/80MVA Transformer #2 Purchase one 138-46kV, 48/80 MVA, transmission substation transformer. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Jan-08	Apr-10	0	42	2,148	0	2,190
Airport Iwilei Shield Wire Replace Airport Iwilei 138kV transmission line shield wire. The project supports HECO's strategies related to Achieve a Preferred Energy Future.	Jun-08	Nov-08	0	1,357	0	0	1,357

Hawaiian Electric Company, Inc.

Description for Strategies

Descriptions for Strategies included in Capital Expenditures Budget

Strategy	Description
Achieve A Preferred Energy Future	♦ Our strategy is to meet our customers' growing demand for electricity through a mix of resources that include energy conservation and efficiency, renewables, distributed generation and central station powered by clean fuels. We will also continue to invest in projects that maintain or improve our system reliability.
Community Commitment	♦ Our strategy is to support our community, protect the environment, and positively engage the public on key company issues and projects.
Customer Partnerships	♦ Our strategy is to pursue new technologies, build strong relations, and provide excellent customer service in order to achieve high levels of customer satisfaction.
Corporate Culture	♦ Our strategy is to be an employer of choice, such that we can attract, develop and retain a dedicated and skilled workforce, led by a quality management team.

Hawaiian Electric Company, Inc.

Integrated Resource Planning Plan

HECO

IRP PLAN

1. Introduction

Paragraph III.D.5 of the Commission's Framework for Integrated Resource Planning ("IRP Framework")¹ states, in relevant part, that: "The integrated resource plan and program implementation schedule approved by the commission shall govern all utility expenditures for capital projects, purchased power, and demand-side management programs." As the Commission explained, "expenditures for all capital projects should be made consistent with the integrated resource plan. . . . In essence, an integrated resource plan is intended to 'control, direct, or strongly influence' all capital expenditures." (D&O 11630 at 8.)

2. Specific Projects Need Not be Identified in an IRP Plan

Projects do not have to have been included in an approved IRP Plan to be consistent with the plan. With a few exceptions, specific capital expenditures projects are not identified or discussed in an IRP Plan. The exceptions have been planned central station generating unit additions, which generally are described as generic projects, rather than specific project proposals. (They have been described as specific projects when they have already been the subject of review proceedings pursuant to paragraph 2.3(g)(2) of General Order No. 7.) The plan also does not include Independent Power Producer ("IPP") projects, unless there is a signed power purchase agreement for the project. Nonetheless, it is contemplated that IPP firm capacity projects may defer utility generation additions, and that IPP as-available energy projects may be added to the utility's system even though there is no explicit reference to these projects in the

¹ An electric utility's integrated resource plan ("IRP Plan") and program implementation schedule ("Action Plans") are developed and filed pursuant to the IRP Framework (revised May 22, 1992), which was adopted by the Hawaii Public Utilities Commission (the "Commission") by Decision and Order No. 11630 (May 22, 1992) ("D&O 11630") in Docket No. 6617, amending and reissuing the IRP Framework adopted in Decision and Order No. 11523 (March 12, 1992).

plan.

Other types of projects, such as transmission and distribution ("T&D") projects, generally are not considered in the IRP process. However, that does not mean that T&D costs are irrelevant in the IRP process, or that an IRP Plan is irrelevant to transmission planning. Avoided T&D costs may be relevant to evaluating the cost-effectiveness of DSM programs. Transmission interconnection requirements for new generation resources should be considered in evaluating the costs of those resources. In addition, planning for the transmission system is done in a manner that is consistent with, and takes into account, the resource additions in the latest resource plan.

Pursuant to the Framework, an electric utility files and requests approval of its IRP Plan and Program Implementation Schedule (or "Action Plans"), as well as a determination that the Preferred Plan represents a reasonable course for meeting the energy needs of its customers and is in the public's interest and is consistent with the goals and objectives of IRP. (See Framework II.D, page 5.)

The utility does not seek specific findings or approvals with respect to specific data or assumptions in its IRP Plan. In accordance with the Framework, the "commission's responsibility, in general, is to determine whether the utility's plan represents a reasonable course for meeting the energy needs of the utility's customers and is in the public interest and consistent with the goals and objectives of integrated resource planning." (Framework II.D.1, page 5.) Thus, the Commission generally addresses the data and assumptions presented in an IRP Plan and Action Plans only to the extent necessary to support the Commission's ultimate finding and conclusions. As a result, the focus is on determining the overall reasonableness of the IRP Plan, and is not on the details that are reviewed in proceedings seeking authorization to

implement specific demand-side and supply-side resource options included in the IRP Plan.

The projects included in HECO's 2008 Capital Expenditures Budget are consistent with and should further HECO's IRP objectives, particularly Objective 4.5 (Power Quality and Reliability), as identified in Chapter 4 of HECO's IRP-3 (October 28, 2005). The projects with expenditures greater than \$2.5 million, excluding customer contributions, will be submitted to the Commission for review pursuant to General Order No. 7, paragraph 2.3(g)(2), as modified by Decision and Order No. 21002, filed May 27, 2004, in Docket No. 03-0257.

3. Given Their General Focus, IRP Plans May Not Even Be Approved

While the Commission approved HECO's IRP Plan filed in its first IRP cycle, it has not deemed it necessary to approve HECO's IRP Plans that were filed in the second and third IRP cycles.

HECO's 2nd IRP Plan was filed on January 30, 1998, in Docket No. 95-0347. Following the filing of the parties' Statements of Position ("SOP") in July 1999, the parties were unable to reach agreement on additional procedural steps. On November 22, 2000, the Commission held a status conference where the parties agreed to meet informally to attempt to reach a stipulation. The parties then entered into a Stipulation Regarding Hearing and Commission Approval filed January 17, 2001, which disposed of the docket without the need for a hearing, subject to Commission approval. The Commission approved the stipulation in Docket No. 95-0347 by Order No. 18340 dated January 29, 2001. Pursuant to the stipulation, HECO's December 2002 Evaluation Report, which addressed its second IRP Plan, was filed on December 31, 2002.

The Commission opened HECO's third IRP cycle of IRP ("IRP-3") by Order No. 20430, filed September 11, 2003, in Docket No. 03-0253. HECO's IRP-3 was filed on October 28, 2005. By Order No. 23312, filed March 21, 2007, the Commission, among other things, (1)

approved the Parties agreed upon terms to govern the disposition of HECO's IRP-3, (2) approved the Parties agreed upon procedures to govern the development of HECO's IRP-4, and (3) required HECO to file its IRP-3 Evaluation Report by May 31, 2007. HECO's IRP-3 Evaluation Report was filed on May 31, 2007.

The Commission opened HECO's fourth IRP cycle ("IRP-4") by Order No. 23328, filed March 29, 2007, in Docket No. 2007-0084, and required HECO to file its IRP-4 by June 30, 2008.

4. IRP Plans are Flexible

The resource plan resulting from the IRP process is not a fixed, unchanging plan. This is consistent with the Companies' integrated resource planning strategy which has been to select plans that are flexible enough to account for changes in planning assumptions and forecasts. This allows for major decisions regarding the implementation of program options (both supply-side and demand-side resources) to be made incrementally, based on the best available information at the time decisions must be made. Thus, the IRP Plans may be better characterized as planning "strategies", rather than as fixed courses of action. The plans identify what information is critical to the decision making process, and also identify when the strategic decisions need to be made.

The Commission has recognized in other types of proceedings that IRP Plans are dynamic and not fixed plans. For example, the resource plan used to compute avoided costs is not necessarily the utility's approved IRP Plan, but is its most current resource plan, which takes into account current circumstances such as those reflected in an IRP plan evaluation, or a biennial PURPA data filing. (See, e.g., Docket No. 97-0102 [HCPC Complaint], Decision and Order No. 16717 [November 25, 1998], page 7.)

CA-IR-28

Provide a complete and detailed copy of all existing strategic business plans that are in place for HECO for 2008 and/or later years.

HECO Response:

See Attachment 1 of this response for a copy of Hawaiian Electric Companies' Corporate Strategies & Goals for 2008 through 2012. This document is provided to all employees as part of an annual meeting to provide an update to the company's strategic plan and to share our 5-year key strategies and goals. Attachment 1 contains confidential information and is provided subject to Protective Order.

Attachment 1 is confidential and will be provided
after a Protective Order is issued in this proceeding.

CA-IR-29

Explain how HECO reports its monthly and quarterly financial and operational performance to Hawaiian Electric Industries ("HEI") and provide a complete specimen copy of each type of recurring periodic report that is routinely employed in this process for the most current available period in 2008.

HECO Response:

HECO provides financial and operational performance information to HEI through the following reports: an accounting report, performance report, and variance explanation summary. HECO objects to providing copies of these reports on the grounds that these reports are company confidential and not intended to be disclosed or made public.

These reports contain financial information, including forward looking income and earnings information, and the unprotected disclosure of information could trigger requirements under the rules and guidance of the Securities and Exchange Commission and/or the New York Stock Exchange that information that would be meaningful to investors (such as earnings forecasts) be released to all investors, if the information is disclosed beyond a limited number of "insiders." Forecast earnings, etc. are the types of information that, if selectively released, could violate such requirements.

Without waiving its objection, upon issuance of a protective order, the Company will provide the following specimen copies of each of the three periodic reports mentioned:

- i. Attachment 1 shows the Monthly Accounting Report No. 1 for the period ended December 31, 2007.
- ii. Attachment 2 shows selected information pertaining to HECO sales and O&M expenses from a performance report for the period ended July 31, 2008 that is issued monthly to HEI, and HECO and HEI Boards of Directors. (HECO objects

to making available, even under protective order, the information pertaining to HELCO and MECO on grounds that such information is not relevant to this docket. HECO also objects to providing customer information contained in these reports even under protective order due to privacy concerns. In addition, HECO objects to making available, even under protective order, the entire report. The report contains forward looking financial information and contains confidential information intended solely as a management tool, and is not intended to be disclosed or made public. Were these internal documents subject to review in a regulatory proceeding, their candid nature and, therefore, their value would diminish significantly in the future. These reports are also intentionally brief in nature since HECO and HEI Board of Directors understand the context behind the points. Without the proper perspective and understanding of the facts and circumstances under which the points are reported, information can be taken out of context. If the Company is required to produce internal reports at the time of rate cases, the information will have to be generated in a fashion suitable for external publication, rather than in its present form used for internal management purposes. The preparation of such explanations would be unduly burdensome, as well as counter productive.)

- iii. Please see HECO's response to CA-IR-26, Attachment 2, which shows the variance explanation summary provided to HEI on a monthly basis.

**Confidential Information Deleted
Pursuant To Protective Order, Filed on**

CA-IR-29
DOCKET NO. 2008-0083
ATTACHMENTS 1-2

Attachments 1 and 2 are confidential and will be provided
after a Protective Order is issued in this proceeding.

CA-IR-30

Please provide a detailed statement of HECO and HEI actual employee levels on a quarterly basis for each year 2006 through 2008, to-date, indicating the numbers of full-time, part-time and temporary employees in each department and responsibility area ("RA") and/or other reportable work groups and the comparable numbers of authorized, but unfilled positions of each type within each department, RA or work group.

HECO Response:

Reports containing the requested information on HECO and HEI's actual employee levels by department, RA, and employee type (full time, part time, temporary) at the end of each quarter from 2006 to June 30, 2008, and including July 31, 2008, are provided on pages 2 to 25. These reports reflect the organizational structure in place at the end of each respective quarter, which may differ from the current organizational structure at HECO and HEI, provided in responses to CA-IR-24 and CA-IR-31. The reports also exclude employees whose labor expenses are recovered through the Demand-side Management ("DSM") adjustment surcharge from the forecast budget and actual employee count levels.

HECO and HEI do not track "authorized" positions. HECO and HEI monitor staffing levels using the "budget" employee counts. The difference between the budgeted and the actual employee count levels may be viewed as the number of unfilled positions. Because HECO and HEI's budgets do not identify employee type (full time, part time, and temporary), for the purpose of providing the requested comparison, the differences between HECO's total actual employee counts and the budgeted employee levels by RA are reflected in the following pages.

In addition, corrections have been made to HECO-1503, submitted in direct testimony, to reflect the recent reinstatement of one employee in Power Supply Operations and Maintenance (PIW) retroactively to 2006 and a calculation correction to the total year end staffing for 2007 from 1498 to 1493. A revised HECO-1503 is submitted in this response as Attachment 1.

Hawaiian Electric Company, Inc.
March 31, 2006 Actual Employee Count vs Budget Employee Count

VICE PRESIDENT'S OFFICE	DEPARTMENT NAME	DIVISION NAME	RA	ACTUAL EMPLOYEE COUNT				BUDGET	DIFF
				FULL TIME	PART TIME	TEMP	TOTAL		
CORPORATE EXCELLENCE	COMPENSATION AND BENEFITS	EMPL BENEFITS & HLTH SVCS	PFB	8	0	0	8	10	(2)
CORPORATE EXCELLENCE	COMPENSATION AND BENEFITS	COMPENSATION	PFC	2	0	0	2	2	
CORPORATE EXCELLENCE	COMPENSATION AND BENEFITS	DISABILITY MANAGEMENT	PPW	3	0	0	3	3	
CORPORATE EXCELLENCE	INDUSTRIAL RELATIONS	ADMINISTRATION	PPA	3	0	0	3	3	
CORPORATE EXCELLENCE	INDUSTRIAL RELATIONS	LABOR REL & WAGE ADMIN	PPI	6	0	0	6	6	
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	CORPORATE SAFETY	PFS	10	0	0	10	13	(3)
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	ADMINISTRATION	PHA	2	0	0	2	2	
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	FACILITIES OPERATIONS	PHB	15	0	0	15	15	
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	FACILITIES PLANNING	PHF	6	0	0	6	8	(2)
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	SECURITY	PHS	11	0	0	11	10	1
CORPORATE EXCELLENCE	VP CORPORATE EXCELLENCE	VP CORPORATE EXCELLENCE	P6V	2	0	0	2	2	
CORPORATE EXCELLENCE	WORKFORCE STAFFING & DEVELOP	ADMINISTRATION	PFA	3	0	0	3	4	(1)
CORPORATE EXCELLENCE	WORKFORCE STAFFING & DEVELOP	CLIENT SERVICES & CONSULTING	PFD	9	0	1	10	12	(2)
CORPORATE EXCELLENCE	WORKFORCE STAFFING & DEVELOP	ORGANIZ DEV & CONTIN IMPRVMT	PFI	3	0	0	3	4	(1)
CORPORATE EXCELLENCE		SUBTOTAL		83	0	1	84	94	(10)
CORPORATE RELATIONS	CORPORATE COMMUNICATIONS	CORPORATE COMMUNICATIONS	PQC	9	1	0	10	10	
CORPORATE RELATIONS	VP CORPORATE RELATIONS	VP CORPORATE RELATIONS	P1V	2	0	0	2	2	
CORPORATE RELATIONS		SUBTOTAL		11	1	0	12	12	0
CUSTOMER SOLUTIONS	CUSTOMER TECH APPLICATIONS	CUSTOMER TECH APPLICATIONS	PSR	8	0	0	8	10	(2)
CUSTOMER SOLUTIONS	ENERGY SERVICES	ADMINISTRATION	PSA	3	0	0	3	3	
CUSTOMER SOLUTIONS	ENERGY SERVICES	CUSTOMER EFFICIENCY PROGRAM	PSD	10	0	0	10	11	(1)
CUSTOMER SOLUTIONS	ENERGY SERVICES	PRICING	PSP	4	0	0	4	5	(1)
CUSTOMER SOLUTIONS	FORECASTS & RESEARCH	FORECASTS & RESEARCH	PSM	10	0	0	10	10	
CUSTOMER SOLUTIONS	INTEGRATED RESOURCE PLNG	INTEGRATED RESOURCE PLANNING	PYP	5	0	0	5	6	(1)
CUSTOMER SOLUTIONS	MARKETING SERVICES	MARKETING SERVICES	PSN	12	0	0	12	12	
CUSTOMER SOLUTIONS	VP CUSTOMER SOLUTIONS	CUSTOMER SOLUTIONS	P1W	2	0	0	2	2	
CUSTOMER SOLUTIONS		SUBTOTAL		54	0	0	54	59	(5)
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	ADMINISTRATION	PDA	5	0	0	5	7	(2)
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	CONTROL SECTION	PDC	6	0	0	6	8	(2)
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	TRAINING SECTION	PDD	4	0	0	4		4
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	FIELD OPERATION	PDF	25	0	0	25	22	3
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	WEST OVERHEAD	PDJ*	47	0	0	47		
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	EAST OVERHEAD-KOOLAU	PDK*	25	0	0	25		
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	EAST OVERHEAD-WARD	PDL*	42	0	0	42		
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	UNDERGROUND	PDU*	25	0	0	25		
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	OPERATIONS	PDS*	12	0	0	12	174	(23)
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	PLANNING	PDP	20	0	0	20	14	6
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	VEGETATION MANAGEMENT	PDV	2	0	0	2	2	
ENERGY DELIVERY	ENGINEERING	ADMINISTRATION	PBA	7	0	0	7	7	
ENERGY DELIVERY	ENGINEERING	T&D ENGINEERING	PBE	22	0	1	23	26	(3)
ENERGY DELIVERY	ENGINEERING	PROJECT MANAGEMENT	PBP	7	0	0	7	7	
ENERGY DELIVERY	ENGINEERING	STRUCTURAL	PBT	18	0	1	19	18	1
ENERGY DELIVERY	ENGINEERING	SUBST.PROTECTION&TELECOM	PBY	20	0	2	22	22	
ENERGY DELIVERY	ENGINEERING	T&D TECHNICAL SERVICES	PBZ	7	0	0	7	10	(3)
ENERGY DELIVERY	SUPPORT SERVICES	ADMINISTRATION	PVA	5	0	0	5	5	
ENERGY DELIVERY	SUPPORT SERVICES	FLEET	PVF	23	0	0	23	25	(2)
ENERGY DELIVERY	SUPPORT SERVICES	ELECTRICAL & WELDING SERVICES	PVL	12	0	0	12	14	(2)
ENERGY DELIVERY	SUPPORT SERVICES	MATERIALS MANAGEMENT	PVM	28	0	0	28	28	
ENERGY DELIVERY	SUPPORT SERVICES	PURCHASING	PVP	13	0	0	13	15	(2)
ENERGY DELIVERY	SYSTEM OPERATION	ADMINISTRATION	PRA	6	0	0	6	6	
ENERGY DELIVERY	SYSTEM OPERATION	COMMUNICATIONS	PRC	8	0	0	8	8	
ENERGY DELIVERY	SYSTEM OPERATION	OPERATING DISPATCH	PRD	24	0	0	24	27	(3)
ENERGY DELIVERY	SYSTEM OPERATION	OPERATING ENGINEERING	PRE	13	0	0	13	14	(1)
ENERGY DELIVERY	SYSTEM OPERATION	INSTRUMENT & CONTROL	PRI	9	0	0	9	9	
ENERGY DELIVERY	SYSTEM OPERATION	RELAY	PRR	10	0	0	10	10	
ENERGY DELIVERY	SYSTEM OPERATION	SUBSTATION	PRS	36	0	0	36	38	(2)
ENERGY DELIVERY	SYSTEM OPERATION	CONSTRUCTION MANAGEMENT	PRX	3	0	0	3	3	
ENERGY DELIVERY	VP ENERGY DELIVERY	VP ENERGY DELIVERY	P2V	2	0	0	2	2	
ENERGY DELIVERY		SUBTOTAL		486	0	4	490	521	(31)
FINANCE	FINANCIAL VICE PRESIDENT	FINANCIAL VICE PRESIDENT	P4V	3	0	0	3	3	
FINANCE	GENERAL ACCOUNTING	ADMINISTRATION	PAA	5	0	0	5	6	(1)
FINANCE	GENERAL ACCOUNTING	CORPORATE ACCOUNTING	PAC	5	0	0	5	5	
FINANCE	GENERAL ACCOUNTING	COST ACCOUNTING	PAD	10	0	0	10	10	
FINANCE	GENERAL ACCOUNTING	PROPERTY ACCOUNTING	PAT	5	0	0	5	5	
FINANCE	INFO TECHNOLOGY & SVCS	ADMINISTRATION	PEA	2	0	0	2	2	
FINANCE	INFO TECHNOLOGY & SVCS	CUSTOMER CARE	PEC	23	0	0	23	25	(2)
FINANCE	INFO TECHNOLOGY & SVCS	DEVELOPMENT SERVICES	PED	37	0	0	37	38	(1)
FINANCE	INFO TECHNOLOGY & SVCS	INFRASTRUCTURE & OPERATIONS	PEI	24	0	0	24	24	
FINANCE	INFO TECHNOLOGY & SVCS	MAILING SERVICES	PEM	8	0	0	8	9	(1)
FINANCE	MANAGEMENT ACCTG & FIN SVCS	ADMINISTRATION	PKB	4	0	0	4	4	
FINANCE	MANAGEMENT ACCTG & FIN SVCS	BUDGETS	PKC	7	0	0	7	7	
FINANCE	MANAGEMENT ACCTG & FIN SVCS	FINANCIAL ANALYSIS	PKF	3	0	0	3	3	
FINANCE	MANAGEMENT ACCTG & FIN SVCS	ERP ADMINISTRATION	PKM	3	0	0	3	3	
FINANCE	MANAGEMENT ACCTG & FIN SVCS	TREASURY	PKT	5	0	0	5	5	
FINANCE	RISK MANAGEMENT	RISK MANAGEMENT	PKI	9	0	0	9	9	
FINANCE		SUBTOTAL		153	0	0	153	158	(5)
GENERAL COUNSEL	LEGAL	LEGAL	PNC	11	0	0	11	11	
GENERAL COUNSEL	LEGAL	LAND & RIGHTS OF WAY	PNL	5	0	0	5	5	
GENERAL COUNSEL	VP GENERAL COUNSEL	VP-GENERAL COUNSEL	P5V	2	0	0	2	2	
GENERAL COUNSEL		SUBTOTAL		18	0	0	18	18	0
GOVT & COMMUNITY AFFAIRS	EDUCATION & CONSUMER AFFAIRS	EDUCATION & CONSUMER AFFAIRS	POE	8	0	0	8	8	
GOVT & COMMUNITY AFFAIRS	REGULATORY AFFAIRS	REGULATORY AFFAIRS	PNP	7	0	0	7	8	(1)
GOVT & COMMUNITY AFFAIRS	VP GOVT & COMMUNITY AFFAIRS	VP GOVT & COMMUNITY AFFAIRS	P3V	7	0	0	7	7	
GOVT & COMMUNITY AFFAIRS		SUBTOTAL		22	0	0	22	23	(1)

Hawaiian Electric Company, Inc.
March 31, 2006 Actual Employee Count vs Budget Employee Count

VICE PRESIDENT'S OFFICE	DEPARTMENT NAME	DIVISION NAME	RA	ACTUAL EMPLOYEE COUNT				BUDGET	DIFF
				FULL TIME	PART TIME	TEMP	TOTAL		
POWER SUPPLY	ENVIRONMENTAL	ADMINISTRATION	PJA	4	0	0	4	4	
POWER SUPPLY	ENVIRONMENTAL	AIR QUALITY & NOISE	PJB	5	0	0	5	6	(1)
POWER SUPPLY	ENVIRONMENTAL	CHEMISTRY	PJC	6	0	0	6	7	(1)
POWER SUPPLY	ENVIRONMENTAL	WATER & HAZARDOUS MATERIAL	PJW	7	0	0	7	7	
POWER SUPPLY	POWER SUPPLY ENGINEERING	ADMINISTRATION	PYA	3	0	0	3	3	
POWER SUPPLY	POWER SUPPLY ENGINEERING	SUPPORT STAFF	PYC	2	0	0	2	2	
POWER SUPPLY	POWER SUPPLY ENGINEERING	PS TECHNICAL SERVICES	PYE	8	0	0	8	9	(1)
POWER SUPPLY	POWER SUPPLY ENGINEERING	POWER PLANT ELECT ENGRG	PYF	9	0	0	9	12	(3)
POWER SUPPLY	POWER SUPPLY ENGINEERING	POWER PLANT DRAFTING	PYG	2	0	0	2	2	
POWER SUPPLY	POWER SUPPLY ENGINEERING	POWER PLANT PROJECT MGT	PYJ	5	0	0	5	5	
POWER SUPPLY	POWER SUPPLY ENGINEERING	POWR PLANT MECH ENGRG	PYM	11	0	0	11	13	(2)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	O&M ADMINISTRATION	PIB	8	0	0	8	11	(3)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	HONOLULU STATION OPERATIONS	PIH	25	0	0	25	26	(1)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	KAHE STATION OPERATIONS	PIK	60	0	0	60	60	
POWER SUPPLY	POWER SUPPLY OPER & MAINT	KAHE STATION MAINTENANCE	PIL	27	0	0	27	28	(1)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	MAINTENANCE ADMINISTRATION	PIM	2	0	0	2	2	
POWER SUPPLY	POWER SUPPLY OPER & MAINT	HONOLULU STATION MAINTENANCE	PIN	9	0	0	9	9	
POWER SUPPLY	POWER SUPPLY OPER & MAINT	OPERATIONS ADMINISTRATION	PIO	2	0	0	2	3	(1)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	PLANNING AND ENGINEERING	PIP	17	0	1	18	21	(3)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	TRAVELING MAINTENANCE	PIT	67	0	0	67	96	(29)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	WAI'AU STATION OPERATIONS	PIW†	64	0	0	64	64	
POWER SUPPLY	POWER SUPPLY OPER & MAINT	WAI'AU STATION MAINTENANCE	PIX	27	0	0	27	27	
POWER SUPPLY	POWER SUPPLY SERVICES	SERVICES ADMINISTRATION	PIA	3	0	0	3	3	
POWER SUPPLY	POWER SUPPLY SERVICES	POWER PURCHASE	PIC	6	0	0	6	6	
POWER SUPPLY	POWER SUPPLY SERVICES	FUEL RESOURCES	PIF	4	0	0	4	4	
POWER SUPPLY	POWER SUPPLY SERVICES	GENERATION PLANNING	PYB	9	0	0	9	9	
POWER SUPPLY	POWER SUPPLY SERVICES	TRANSMISSION PLANNING	PYT	7	0	0	7	8	(1)
POWER SUPPLY	VP POWER SUPPLY	VP POWER SUPPLY	P7V	2	0	0	2	2	
POWER SUPPLY		SUBTOTAL		401	0	1	402	449	(47)
PRESIDENT - HECO	CORPORATE AUDIT & COMPLIANCE	INTERNAL AUDIT	PNA	8	0	0	8	8	
PRESIDENT - HECO	CORPORATE AUDIT & COMPLIANCE	ADMINISTRATION	PNX	3	0	0	3	4	(1)
PRESIDENT - HECO	PRESIDENTS OFFICE	PRESIDENTS OFFICE	P9P	4	0	0	4	5	(1)
PRESIDENT - HECO		SUBTOTAL		15	0	0	15	17	(2)
SPECIAL PROJECTS	VP SPECIAL PROJECTS	VP SPECIAL PROJECTS	P2W	3	0	0	3	3	
SPECIAL PROJECTS		SUBTOTAL		3	0	0	3	3	0
SR VP ENERGY SOLUTIONS	CUSTOMER INSTALLATION	ADMINISTRATION	PWA	11	0	0	11	11	
SR VP ENERGY SOLUTIONS	CUSTOMER INSTALLATION	PLANNING & DESIGN	PWP	24	0	0	24	27	(3)
SR VP ENERGY SOLUTIONS	CUSTOMER INSTALLATION	ENGINEERING & METER	PWX	13	0	0	13	15	(2)
SR VP ENERGY SOLUTIONS	ENERGY PROJECTS	ENERGY PROJECTS	PNG	9	0	0	9	9	
SR VP ENERGY SOLUTIONS	SR VP ENERGY SOLUTIONS	SR VP ENERGY SOLUTIONS	P9S	4	0	0	4	4	
SR VP ENERGY SOLUTIONS	TECHNOLOGY	TECHNOLOGY	PNR	2	0	1	3	3	
SR VP ENERGY SOLUTIONS		SUBTOTAL		63	0	1	64	69	(5)
SR VP OPERATIONS	CUSTOMER SERVICE	ADMINISTRATION	PCA	4	0	0	4	5	(1)
SR VP OPERATIONS	CUSTOMER SERVICE	CUST ACCOUNTING & BILLING	PCB	6	0	0	6	6	
SR VP OPERATIONS	CUSTOMER SERVICE	CREDIT	PCD	5	0	0	5	5	
SR VP OPERATIONS	CUSTOMER SERVICE	CUSTOMER FIELD SERVICES	PCF	5	0	0	5	5	
SR VP OPERATIONS	CUSTOMER SERVICE	FIELD SERVICE & COLLECTIONS	PCG	26	0	0	26	27	(1)
SR VP OPERATIONS	CUSTOMER SERVICE	CUSTOMER ASSISTANCE CENTER	PCH	28	0	0	28	30	(2)
SR VP OPERATIONS	CUSTOMER SERVICE	METER READING	PCM	34	0	0	34	34	
SR VP OPERATIONS	CUSTOMER SERVICE	PAYMT PROCESS & SUPPORT CTR	PCP	15	0	0	15	17	(2)
SR VP OPERATIONS	CUSTOMER SERVICE	CUSTOMER ACCOUNT SERVICES	PCS	5	0	0	5	5	
SR VP OPERATIONS	SR VP OPERATIONS	SR VP OPERATIONS	P8V	3	0	0	3	3	
SR VP OPERATIONS		SUBTOTAL		131	0	0	131	137	(6)
SR VP PUBLIC AFFAIRS	GOVERNMENTAL RELATIONS	GOVERNMENTAL RELATIONS	PNI	3	0	0	3	3	
SR VP PUBLIC AFFAIRS	SR VP PUBLIC AFFAIRS	SR VP PUBLIC AFFAIRS	P9V	2	0	0	2	2	
SR VP PUBLIC AFFAIRS		SUBTOTAL		5	0	0	5	5	0
		COMPANY TOTAL		1445	1	7	1453	1565	(112)

Employee counts in Customer Solutions exclude employees covered under the DSM surcharge.

*Forecast Budget count for RA PDS includes RA's PDJ, PDK, PDL & PDU.

†Actual employee count increased due to reinstatement of two employees in PIW

Hawaiian Electric Company, Inc.
June 30, 2006 Actual Employee Count vs Budget Employee Count

VICE PRESIDENT'S OFFICE	DEPARTMENT NAME	DIVISION NAME	RA	ACTUAL EMPLOYEE COUNT				BUDGET	DIFF
				FULL TIME	PART TIME	TEMP	TOTAL		
CORPORATE EXCELLENCE	COMPENSATION AND BENEFITS	EMPL BENEFITS & HLTH SVCS	PFB	8	0	0	8	10	(2)
CORPORATE EXCELLENCE	COMPENSATION AND BENEFITS	COMPENSATION	PFC	1	0	0	1	2	(1)
CORPORATE EXCELLENCE	COMPENSATION AND BENEFITS	DISABILITY MANAGEMENT	PPW	3	0	0	3	3	
CORPORATE EXCELLENCE	INDUSTRIAL RELATIONS	ADMINISTRATION	PPA	3	0	0	3	3	
CORPORATE EXCELLENCE	INDUSTRIAL RELATIONS	LABOR REL & WAGE ADMIN	PPI	6	0	0	6	6	
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	CORPORATE SAFETY	PFS	12	0	0	12	13	(1)
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	ADMINISTRATION	PHA	2	0	0	2	2	
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	FACILITIES OPERATIONS	PHB	15	0	0	15	15	
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	FACILITIES PLANNING	PHF	7	0	0	7	8	(1)
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	SECURITY	PHS	10	0	0	10	10	
CORPORATE EXCELLENCE	VP CORPORATE EXCELLENCE	VP CORPORATE EXCELLENCE	P6V	2	0	0	2	2	
CORPORATE EXCELLENCE	WORKFORCE STAFFING & DEVELOP	ADMINISTRATION	PFA	3	0	0	3	4	(1)
CORPORATE EXCELLENCE	WORKFORCE STAFFING & DEVELOP	CLIENT SERVICES & CONSULTING	PFD	9	0	1	10	12	(2)
CORPORATE EXCELLENCE	WORKFORCE STAFFING & DEVELOP	ORGANIZ DEV & CONTIN IMPRVMT	PF1	3	0	0	3	4	(1)
CORPORATE EXCELLENCE		SUBTOTAL		84	0	1	85	94	(9)
CORPORATE RELATIONS	CORPORATE COMMUNICATIONS	CORPORATE COMMUNICATIONS	PQC	9	1	0	10	10	
CORPORATE RELATIONS	VP CORPORATE RELATIONS	VP CORPORATE RELATIONS	P1V	2	0	0	2	2	
CORPORATE RELATIONS		SUBTOTAL		11	1	0	12	12	0
CUSTOMER SOLUTIONS	CUSTOMER TECH APPLICATIONS	CUSTOMER TECH APPLICATIONS	PSR	7	0	0	7	10	(3)
CUSTOMER SOLUTIONS	ENERGY SERVICES	ADMINISTRATION	PSA	3	0	0	3	3	
CUSTOMER SOLUTIONS	ENERGY SERVICES	CUSTOMER EFFICIENCY PROGRAM	PSD	9	0	0	9	11	(2)
CUSTOMER SOLUTIONS	ENERGY SERVICES	PRICING	PSP	4	0	0	4	5	(1)
CUSTOMER SOLUTIONS	FORECASTS & RESEARCH	FORECASTS & RESEARCH	PSM	10	0	0	10	10	
CUSTOMER SOLUTIONS	INTEGRATED RESOURCE PLNG	INTEGRATED RESOURCE PLANNING	PYP	5	0	0	5	6	(1)
CUSTOMER SOLUTIONS	MARKETING SERVICES	MARKETING SERVICES	PSN	12	0	0	12	12	
CUSTOMER SOLUTIONS	VP CUSTOMER SOLUTIONS	CUSTOMER SOLUTIONS	P1W	2	0	0	2	2	
CUSTOMER SOLUTIONS		SUBTOTAL		52	0	0	52	59	(7)
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	ADMINISTRATION	PDA	5	0	0	5	7	(2)
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	CONTROL SECTION	PDC	6	0	0	6	8	(2)
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	TRAINING SECTION	PDD	4	0	0	4		4
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	FIELD OPERATION	PDF	24	0	0	24	22	2
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	WEST OVERHEAD	PDJ*	46	0	0	46		
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	EAST OVERHEAD-KOOLAU	PDK*	25	0	0	25		
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	EAST OVERHEAD-WARD	PDL*	42	0	0	42		
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	UNDERGROUND	PDU*	25	0	0	25		
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	OPERATIONS	PDS*	12	0	0	12	174	(24)
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	PLANNING	PDP	21	0	0	21	14	7
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	VEGETATION MANAGEMENT	PDV	2	0	0	2	2	
ENERGY DELIVERY	ENGINEERING	ADMINISTRATION	PBA	7	0	0	7	7	
ENERGY DELIVERY	ENGINEERING	T&D ENGINEERING	PBE	22	0	1	23	26	(3)
ENERGY DELIVERY	ENGINEERING	PROJECT MANAGEMENT	PBP	7	0	0	7	7	
ENERGY DELIVERY	ENGINEERING	STRUCTURAL	PBT	18	0	1	19	18	1
ENERGY DELIVERY	ENGINEERING	SUBST, PROTECTION & TELECOM	PBY	20	0	3	23	22	1
ENERGY DELIVERY	ENGINEERING	T&D TECHNICAL SERVICES	PBZ	7	0	0	7	10	(3)
ENERGY DELIVERY	SUPPORT SERVICES	ADMINISTRATION	PVA	5	0	0	5	5	
ENERGY DELIVERY	SUPPORT SERVICES	FLEET	PVF	23	0	0	23	25	(2)
ENERGY DELIVERY	SUPPORT SERVICES	ELECTRICAL & WELDING SERVICES	PVL	12	0	0	12	14	(2)
ENERGY DELIVERY	SUPPORT SERVICES	MATERIALS MANAGEMENT	PVM	28	0	0	28	28	
ENERGY DELIVERY	SUPPORT SERVICES	PURCHASING	PVP	12	0	0	12	15	(3)
ENERGY DELIVERY	SYSTEM OPERATION	ADMINISTRATION	PRA	6	0	0	6	6	
ENERGY DELIVERY	SYSTEM OPERATION	COMMUNICATIONS	PRC	8	0	0	8	8	
ENERGY DELIVERY	SYSTEM OPERATION	OPERATING DISPATCH	PRD	25	0	0	25	27	(2)
ENERGY DELIVERY	SYSTEM OPERATION	OPERATING ENGINEERING	PRE	13	0	0	13	14	(1)
ENERGY DELIVERY	SYSTEM OPERATION	INSTRUMENT & CONTROL	PRI	8	0	0	8	9	(1)
ENERGY DELIVERY	SYSTEM OPERATION	RELAY	PRR	10	0	0	10	10	
ENERGY DELIVERY	SYSTEM OPERATION	SUBSTATION	PRS	35	0	0	35	38	(3)
ENERGY DELIVERY	SYSTEM OPERATION	CONSTRUCTION MANAGEMENT	PRX	3	0	0	3	3	
ENERGY DELIVERY	VP ENERGY DELIVERY	VP ENERGY DELIVERY	P2V	3	0	0	3	2	1
ENERGY DELIVERY		SUBTOTAL		484	0	5	489	521	(32)
FINANCE	FINANCIAL VICE PRESIDENT	FINANCIAL VICE PRESIDENT	P4V	3	0	0	3	3	
FINANCE	GENERAL ACCOUNTING	ADMINISTRATION	PAA	6	0	0	6	6	
FINANCE	GENERAL ACCOUNTING	CORPORATE ACCOUNTING	PAC	5	0	0	5	5	
FINANCE	GENERAL ACCOUNTING	COST ACCOUNTING	PAD	10	0	0	10	10	
FINANCE	GENERAL ACCOUNTING	PROPERTY ACCOUNTING	PAT	5	0	0	5	5	
FINANCE	INFO TECHNOLOGY & SVCS	ADMINISTRATION	PEA	2	0	0	2	2	
FINANCE	INFO TECHNOLOGY & SVCS	CUSTOMER CARE	PEC	23	0	0	23	25	(2)
FINANCE	INFO TECHNOLOGY & SVCS	DEVELOPMENT SERVICES	PED	37	0	0	37	38	(1)
FINANCE	INFO TECHNOLOGY & SVCS	INFRASTRUCTURE & OPERATIONS	PEI	23	0	0	23	24	(1)
FINANCE	INFO TECHNOLOGY & SVCS	MAILING SERVICES	PEM	8	0	0	8	9	(1)
FINANCE	INFO TECHNOLOGY & SVCS	PUBLISHING & RECORDS SERVICES	PER	1	0	0	1		1
FINANCE	MANAGEMENT ACCTG & FIN SVCS	ADMINISTRATION	PKB	4	0	0	4	4	
FINANCE	MANAGEMENT ACCTG & FIN SVCS	BUDGETS	PKC	7	0	0	7	7	
FINANCE	MANAGEMENT ACCTG & FIN SVCS	FINANCIAL ANALYSIS	PKF	3	0	0	3	3	
FINANCE	MANAGEMENT ACCTG & FIN SVCS	ERP ADMINISTRATION	PKM	3	0	0	3	3	
FINANCE	MANAGEMENT ACCTG & FIN SVCS	TREASURY	PKT	5	0	0	5	5	
FINANCE	RISK MANAGEMENT	RISK MANAGEMENT	PKI	9	0	0	9	9	
FINANCE		SUBTOTAL		154	0	0	154	158	(4)
GENERAL COUNSEL	LEGAL	LEGAL	PNC	11	0	0	11	11	
GENERAL COUNSEL	LEGAL	LAND & RIGHTS OF WAY	PNL	5	0	0	5	5	

Hawaiian Electric Company, Inc.
June 30, 2006 Actual Employee Count vs Budget Employee Count

VICE PRESIDENT'S OFFICE	DEPARTMENT NAME	DIVISION NAME	RA	ACTUAL EMPLOYEE COUNT				BUDGET	DIFF
				FULL TIME	PART TIME	TEMP	TOTAL		
GENERAL COUNSEL	VP GENERAL COUNSEL	VP-GENERAL COUNSEL	P5V	2	0	0	2	2	
GENERAL COUNSEL		SUBTOTAL		18	0	0	18	18	0
GOVT & COMMUNITY AFFAIRS	EDUCATION & CONSUMER AFFAIRS	EDUCATION & CONSUMER AFFAIRS	PQE	8	0	0	8	8	
GOVT & COMMUNITY AFFAIRS	REGULATORY AFFAIRS	REGULATORY AFFAIRS	PNP	7	0	0	7	8	(1)
GOVT & COMMUNITY AFFAIRS	VP GOVT & COMMUNITY AFFAIRS	VP GOVT & COMMUNITY AFFAIRS	P3V	7	0	0	7	7	
GOVT & COMMUNITY AFFAIRS		SUBTOTAL		22	0	0	22	23	(1)
POWER SUPPLY	ENVIRONMENTAL	ADMINISTRATION	PJA	4	0	0	4	4	
POWER SUPPLY	ENVIRONMENTAL	AIR QUALITY & NOISE	PJB	5	0	0	5	6	(1)
POWER SUPPLY	ENVIRONMENTAL	CHEMISTRY	PJC	6	0	0	6	7	(1)
POWER SUPPLY	ENVIRONMENTAL	WATER & HAZARDOUS MATERIAL	PJW	7	0	0	7	7	
POWER SUPPLY	POWER SUPPLY ENGINEERING	ADMINISTRATION	PYA	3	0	0	3	3	
POWER SUPPLY	POWER SUPPLY ENGINEERING	SUPPORT STAFF	PYC	2	0	0	2	2	
POWER SUPPLY	POWER SUPPLY ENGINEERING	PS TECHNICAL SERVICES	PYE	7	0	0	7	9	(2)
POWER SUPPLY	POWER SUPPLY ENGINEERING	POWER PLANT ELECT ENGRG	PYF	6	0	0	6	12	(6)
POWER SUPPLY	POWER SUPPLY ENGINEERING	POWER PLANT DRAFTING	PYG	2	0	0	2	2	
POWER SUPPLY	POWER SUPPLY ENGINEERING	POWER PLANT PROJECT MGT	PYJ	5	0	0	5	5	
POWER SUPPLY	POWER SUPPLY ENGINEERING	POWR PLANT MECH ENGRG	PYM	11	0	0	11	13	(2)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	O&M ADMINISTRATION	PIB	8	0	0	8	10	(2)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	TRAINING	PID	2	0	0	2	2	
POWER SUPPLY	POWER SUPPLY OPER & MAINT	HONOLULU STATION OPERATIONS	PIH	26	0	0	26	26	
POWER SUPPLY	POWER SUPPLY OPER & MAINT	KAHE STATION OPERATIONS	PIK	55	0	0	55	60	(5)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	KAHE STATION MAINTENANCE	PIL	26	0	0	26	28	(2)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	MAINTENANCE ADMINISTRATION	PIM	2	0	0	2	2	
POWER SUPPLY	POWER SUPPLY OPER & MAINT	HONOLULU STATION MAINTENANCE	PIN	9	0	0	9	9	
POWER SUPPLY	POWER SUPPLY OPER & MAINT	OPERATIONS ADMINISTRATION	PIO	2	0	0	2	3	(1)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	PLANNING AND ENGINEERING	PIP	18	0	2	20	21	(1)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	TRAVELING MAINTENANCE	PIT	67	0	0	67	96	(29)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	WAI'AU STATION OPERATIONS	PIW†	62	0	0	62	63	(1)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	WAI'AU STATION MAINTENANCE	PIX	27	0	0	27	27	
POWER SUPPLY	POWER SUPPLY SERVICES	SERVICES ADMINISTRATION	PIA	3	0	0	3	3	
POWER SUPPLY	POWER SUPPLY SERVICES	POWER PURCHASE	PIC	6	0	0	6	6	
POWER SUPPLY	POWER SUPPLY SERVICES	FUEL RESOURCES	PIF	4	0	0	4	4	
POWER SUPPLY	POWER SUPPLY SERVICES	GENERATION PLANNING	PYB	8	0	1	9	9	
POWER SUPPLY	POWER SUPPLY SERVICES	TRANSMISSION PLANNING	PYT	7	0	0	7	8	(1)
POWER SUPPLY	VP POWER SUPPLY	VP POWER SUPPLY	P7V	2	0	0	2	2	
POWER SUPPLY		SUBTOTAL		392	0	3	395	449	(54)
PRESIDENT - HECO	CORPORATE AUDIT & COMPLIANCE	INTERNAL AUDIT	PNA	7	0	0	7	8	(1)
PRESIDENT - HECO	CORPORATE AUDIT & COMPLIANCE	ADMINISTRATION	PNX	3	0	0	3	4	(1)
PRESIDENT - HECO	PRESIDENTS OFFICE	PRESIDENTS OFFICE	P9P	4	0	0	4	5	(1)
PRESIDENT - HECO		SUBTOTAL		14	0	0	14	17	(3)
SPECIAL PROJECTS	VP SPECIAL PROJECTS	VP SPECIAL PROJECTS	P2W	3	0	0	3	3	
SPECIAL PROJECTS		SUBTOTAL		3	0	0	3	3	0
SR VP ENERGY SOLUTIONS	CUSTOMER INSTALLATION	ADMINISTRATION	PWA	11	0	0	11	11	
SR VP ENERGY SOLUTIONS	CUSTOMER INSTALLATION	PLANNING & DESIGN	PWP	24	0	0	24	27	(3)
SR VP ENERGY SOLUTIONS	CUSTOMER INSTALLATION	ENGINEERING & METER	PWX	13	0	0	13	15	(2)
SR VP ENERGY SOLUTIONS	ENERGY PROJECTS	ENERGY PROJECTS	PNG	8	0	0	8	9	(1)
SR VP ENERGY SOLUTIONS	SR VP ENERGY SOLUTIONS	SR VP ENERGY SOLUTIONS	P9S	4	0	0	4	4	
SR VP ENERGY SOLUTIONS	TECHNOLOGY	TECHNOLOGY	PNR	2	0	1	3	3	
SR VP ENERGY SOLUTIONS		SUBTOTAL		62	0	1	63	69	(6)
SR VP OPERATIONS	CUSTOMER SERVICE	ADMINISTRATION	PCA	4	0	0	4	5	(1)
SR VP OPERATIONS	CUSTOMER SERVICE	CUST ACCOUNTING & BILLING	PCB	6	0	0	6	6	
SR VP OPERATIONS	CUSTOMER SERVICE	CREDIT	PCD	5	0	0	5	5	
SR VP OPERATIONS	CUSTOMER SERVICE	CUSTOMER FIELD SERVICES	PCF	4	0	0	4	5	(1)
SR VP OPERATIONS	CUSTOMER SERVICE	FIELD SERVICE & COLLECTIONS	PCG	26	0	0	26	29	(3)
SR VP OPERATIONS	CUSTOMER SERVICE	CUSTOMER ASSISTANCE CENTER	PCH	28	0	0	28	30	(2)
SR VP OPERATIONS	CUSTOMER SERVICE	METER READING	PCM	34	0	0	34	34	
SR VP OPERATIONS	CUSTOMER SERVICE	PAYMT PROCESS & SUPPORT CTR	PCP	14	0	0	14	17	(3)
SR VP OPERATIONS	CUSTOMER SERVICE	CUSTOMER ACCOUNT SERVICES	PCS	5	0	0	5	5	
SR VP OPERATIONS	SR VP OPERATIONS	SR VP OPERATIONS	P8V	3	0	0	3	3	
SR VP OPERATIONS		SUBTOTAL		129	0	0	129	139	(10)
SR VP PUBLIC AFFAIRS	GOVERNMENTAL RELATIONS	GOVERNMENTAL RELATIONS	PNI	3	0	0	3	3	
SR VP PUBLIC AFFAIRS	SR VP PUBLIC AFFAIRS	SR VP PUBLIC AFFAIRS	P9V	2	0	0	2	2	
SR VP PUBLIC AFFAIRS		SUBTOTAL		5	0	0	5	5	0
		COMPANY TOTAL		1430	1	10	1441	1567	(126)

Employee counts in Customer Solutions exclude employees covered under the DSM surcharge.

*Forecast Budget count for RA PDS includes RA's PDJ, PDK, PDL & PDU.

†Actual employee count increased due to reinstatement of two employees in PIW.

Hawaiian Electric Company, Inc.
September 30, 2006 Actual Employee Count vs Budget Employee Count

VICE PRESIDENT'S OFFICE	DEPARTMENT NAME	DIVISION NAME	RA	ACTUAL EMPLOYEE COUNT				BUDGET	DIFF
				FULL TIME	PART TIME	TEMP	TOTAL		
CORPORATE EXCELLENCE	COMPENSATION AND BENEFITS	EMPL BENEFITS & HLTH SVCS	PFB	7	0	0	7	10	(3)
CORPORATE EXCELLENCE	COMPENSATION AND BENEFITS	COMPENSATION	PFC	2	0	0	2	2	
CORPORATE EXCELLENCE	COMPENSATION AND BENEFITS	DISABILITY MANAGEMENT	PPW	3	0	0	3	3	
CORPORATE EXCELLENCE	INDUSTRIAL RELATIONS	ADMINISTRATION	PPA	3	0	0	3	3	
CORPORATE EXCELLENCE	INDUSTRIAL RELATIONS	LABOR REL & WAGE ADMIN	PPI	6	0	0	6	6	
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	CORPORATE SAFETY	PFS	12	0	0	12	13	(1)
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	ADMINISTRATION	PHA	2	0	0	2	2	
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	FACILITIES OPERATIONS	PHB	15	0	0	15	15	
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	FACILITIES PLANNING	PHF	7	0	0	7	8	(1)
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	SECURITY	PHS	10	0	0	10	10	
CORPORATE EXCELLENCE	VP CORPORATE EXCELLENCE	VP CORPORATE EXCELLENCE	P6V	2	0	0	2	2	
CORPORATE EXCELLENCE	WORKFORCE STAFFING & DEVELOP	ADMINISTRATION	PFA	3	0	0	3	4	(1)
CORPORATE EXCELLENCE	WORKFORCE STAFFING & DEVELOP	CLIENT SERVICES & CONSULTING	PFD	9	0	2	11	12	(1)
CORPORATE EXCELLENCE	WORKFORCE STAFFING & DEVELOP	ORGANIZ DEV & CONTIN IMPRVMT	PFI	3	0	0	3	4	(1)
CORPORATE EXCELLENCE		SUBTOTAL		84	0	2	86	94	(8)
CORPORATE RELATIONS	CORPORATE COMMUNICATIONS	CORPORATE COMMUNICATIONS	PQC	7	1	0	8	10	(2)
CORPORATE RELATIONS	VP CORPORATE RELATIONS	VP CORPORATE RELATIONS	P1V	3	0	0	3	2	1
CORPORATE RELATIONS		SUBTOTAL		10	1	0	11	12	(1)
CUSTOMER SOLUTIONS	CUSTOMER TECH APPLICATIONS	CUSTOMER TECH APPLICATIONS	PSR	8	0	0	8	10	(2)
CUSTOMER SOLUTIONS	ENERGY SERVICES	ADMINISTRATION	PSA	3	0	0	3	3	
CUSTOMER SOLUTIONS	ENERGY SERVICES	CUSTOMER EFFICIENCY PROGRAM	PSD	9	0	0	9	11	(2)
CUSTOMER SOLUTIONS	ENERGY SERVICES	PRICING	PSP	4	0	0	4	5	(1)
CUSTOMER SOLUTIONS	FORECASTS & RESEARCH	FORECASTS & RESEARCH	PSM	9	0	0	9	10	(1)
CUSTOMER SOLUTIONS	INTEGRATED RESOURCE PLNG	INTEGRATED RESOURCE PLANNING	PYP	5	0	0	5	6	(1)
CUSTOMER SOLUTIONS	MARKETING SERVICES	MARKETING SERVICES	PSN	11	0	0	11	12	(1)
CUSTOMER SOLUTIONS	VP CUSTOMER SOLUTIONS	CUSTOMER SOLUTIONS	P1W	2	0	0	2	2	
CUSTOMER SOLUTIONS		SUBTOTAL		51	0	0	51	59	(8)
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	ADMINISTRATION	PDA	5	0	0	5	7	(2)
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	CONTROL SECTION	PDC	6	0	0	6	8	(2)
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	TRAINING SECTION	PDD	1	0	0	1		1
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	FIELD OPERATION	PDF	24	0	0	24	22	2
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	WEST OVERHEAD	PDJ*	44	0	0	44		
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	EAST OVERHEAD-KOOLAU	PDK*	26	0	0	26		
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	EAST OVERHEAD-WARD	PDL*	40	0	0	40		
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	UNDERGROUND	PDU*	26	0	0	26		
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	OPERATIONS	PDS*	13	0	0	13	180	(31)
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	PLANNING	PDP	23	0	0	23	14	9
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	VEGETATION MANAGEMENT	PDV	1	0	0	1	2	(1)
ENERGY DELIVERY	ENGINEERING	ADMINISTRATION	PBA	7	0	0	7	7	
ENERGY DELIVERY	ENGINEERING	T&D ENGINEERING	PBE	22	0	1	23	26	(3)
ENERGY DELIVERY	ENGINEERING	PROJECT MANAGEMENT	PBP	7	0	0	7	7	
ENERGY DELIVERY	ENGINEERING	STRUCTURAL	PBT	18	0	0	18	18	
ENERGY DELIVERY	ENGINEERING	SUBST, PROTECTION & TELECOM	PBY	22	0	1	23	22	1
ENERGY DELIVERY	ENGINEERING	T&D TECHNICAL SERVICES	PBZ	7	0	0	7	10	(3)
ENERGY DELIVERY	SUPPORT SERVICES	ADMINISTRATION	PVA	5	0	0	5	5	
ENERGY DELIVERY	SUPPORT SERVICES	FLEET	PVF	21	0	0	21	25	(4)
ENERGY DELIVERY	SUPPORT SERVICES	ELECTRICAL & WELDING SERVICES	PVL	12	0	0	12	14	(2)
ENERGY DELIVERY	SUPPORT SERVICES	MATERIALS MANAGEMENT	PVM	27	0	0	27	28	(1)
ENERGY DELIVERY	SUPPORT SERVICES	PURCHASING	PVP	12	0	0	12	15	(3)
ENERGY DELIVERY	SYSTEM OPERATION	ADMINISTRATION	PRA	6	0	0	6	6	
ENERGY DELIVERY	SYSTEM OPERATION	COMMUNICATIONS	PRC	8	0	0	8	8	
ENERGY DELIVERY	SYSTEM OPERATION	OPERATING DISPATCH	PRD	25	0	0	25	27	(2)
ENERGY DELIVERY	SYSTEM OPERATION	OPERATING ENGINEERING	PRE	13	0	0	13	14	(1)
ENERGY DELIVERY	SYSTEM OPERATION	INSTRUMENT & CONTROL	PRI	8	0	0	8	9	(1)
ENERGY DELIVERY	SYSTEM OPERATION	RELAY	PRR	10	0	0	10	10	
ENERGY DELIVERY	SYSTEM OPERATION	SUBSTATION	PRS	35	0	0	35	38	(3)
ENERGY DELIVERY	SYSTEM OPERATION	CONSTRUCTION MANAGEMENT	PRX	3	0	0	3	3	
ENERGY DELIVERY	VP ENERGY DELIVERY	VP ENERGY DELIVERY	P2V	2	0	0	2	2	
ENERGY DELIVERY		SUBTOTAL		479	0	2	481	527	(46)
FINANCE	FINANCIAL VICE PRESIDENT	FINANCIAL VICE PRESIDENT	P4V	4	0	0	4	3	1
FINANCE	GENERAL ACCOUNTING	ADMINISTRATION	PAA	6	0	0	6	6	
FINANCE	GENERAL ACCOUNTING	CORPORATE ACCOUNTING	PAC	5	0	0	5	5	
FINANCE	GENERAL ACCOUNTING	COST ACCOUNTING	PAD	10	0	0	10	10	
FINANCE	GENERAL ACCOUNTING	PROPERTY ACCOUNTING	PAT	5	0	0	5	5	
FINANCE	INFO TECHNOLOGY & SVCS	ADMINISTRATION	PEA	2	0	0	2	2	
FINANCE	INFO TECHNOLOGY & SVCS	CUSTOMER CARE	PEC	25	0	0	25	25	
FINANCE	INFO TECHNOLOGY & SVCS	DEVELOPMENT SERVICES	PED	35	0	0	35	38	(3)
FINANCE	INFO TECHNOLOGY & SVCS	INFRASTRUCTURE & OPERATIONS	PEI	22	0	0	22	24	(2)
FINANCE	INFO TECHNOLOGY & SVCS	MAILING SERVICES	PEM	8	0	0	8	9	(1)
FINANCE	MANAGEMENT ACCTG & FIN SVCS	ADMINISTRATION	PKB	4	0	0	4	4	
FINANCE	MANAGEMENT ACCTG & FIN SVCS	BUDGETS	PKC	7	0	0	7	7	
FINANCE	MANAGEMENT ACCTG & FIN SVCS	FINANCIAL ANALYSIS	PKF	3	0	0	3	3	
FINANCE	MANAGEMENT ACCTG & FIN SVCS	ERP ADMINISTRATION	PKM	3	0	0	3	3	
FINANCE	MANAGEMENT ACCTG & FIN SVCS	TREASURY	PKT	5	0	0	5	5	
FINANCE	RISK MANAGEMENT	RISK MANAGEMENT	PKI	9	0	0	9	9	
FINANCE		SUBTOTAL		153	0	0	153	158	(5)
GENERAL COUNSEL	LEGAL	LEGAL	PNC	11	0	0	11	11	
GENERAL COUNSEL	LEGAL	LAND & RIGHTS OF WAY	PNL	4	0	0	4	5	(1)
GENERAL COUNSEL	VP GENERAL COUNSEL	VP-GENERAL COUNSEL	P5V	2	0	0	2	2	
GENERAL COUNSEL		SUBTOTAL		17	0	0	17	18	(1)
GOVT & COMMUNITY AFFAIRS	EDUCATION & CONSUMER AFFAIRS	EDUCATION & CONSUMER AFFAIRS	PQE	8	0	0	8	8	
GOVT & COMMUNITY AFFAIRS	REGULATORY AFFAIRS	REGULATORY AFFAIRS	PNP	7	0	0	7	8	(1)
GOVT & COMMUNITY AFFAIRS	VP GOVT & COMMUNITY AFFAIRS	VP GOVT & COMMUNITY AFFAIRS	P3V	7	0	0	7	7	
GOVT & COMMUNITY AFFAIRS		SUBTOTAL		22	0	0	22	23	(1)

Hawaiian Electric Company, Inc.
September 30, 2006 Actual Employee Count vs Budget Employee Count

VICE PRESIDENT'S OFFICE	DEPARTMENT NAME	DIVISION NAME	RA	ACTUAL EMPLOYEE COUNT				BUDGET	DIFF
				FULL TIME	PART TIME	TEMP	TOTAL		
POWER SUPPLY	ENVIRONMENTAL	ADMINISTRATION	PJA	4	0	0	4	4	
POWER SUPPLY	ENVIRONMENTAL	AIR QUALITY & NOISE	PJB	5	0	0	5	6	(1)
POWER SUPPLY	ENVIRONMENTAL	CHEMISTRY	PJC	6	0	0	6	7	(1)
POWER SUPPLY	ENVIRONMENTAL	WATER & HAZARDOUS MATERIAL	PJW	7	0	0	7	7	
POWER SUPPLY	POWER SUPPLY ENGINEERING	ADMINISTRATION	PYA	3	0	0	3	3	
POWER SUPPLY	POWER SUPPLY ENGINEERING	SUPPORT STAFF	PYC	2	0	0	2	2	
POWER SUPPLY	POWER SUPPLY ENGINEERING	PS TECHNICAL SERVICES	PYE	8	0	0	8	9	(1)
POWER SUPPLY	POWER SUPPLY ENGINEERING	POWER PLANT ELECT ENGRG	PYF	7	0	0	7	12	(5)
POWER SUPPLY	POWER SUPPLY ENGINEERING	POWER PLANT DRAFTING	PYG	2	0	0	2	2	
POWER SUPPLY	POWER SUPPLY ENGINEERING	POWER PLANT PROJECT MGT	PYJ	4	0	0	4	5	(1)
POWER SUPPLY	POWER SUPPLY ENGINEERING	POWR PLANT MECH ENGRG	PYM	11	0	0	11	13	(2)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	O&M ADMINISTRATION	PIB	8	0	0	8	10	(2)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	TRAINING	PID	2	0	0	2	2	
POWER SUPPLY	POWER SUPPLY OPER & MAINT	HONOLULU STATION OPERATIONS	PIH	26	0	0	26	26	
POWER SUPPLY	POWER SUPPLY OPER & MAINT	KAHE STATION OPERATIONS	PIK	56	0	0	56	60	(4)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	KAHE STATION MAINTENANCE	PIL	27	0	0	27	28	(1)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	MAINTENANCE ADMINISTRATION	PIM	2	0	0	2	2	
POWER SUPPLY	POWER SUPPLY OPER & MAINT	HONOLULU STATION MAINTENANCE	PIN	9	0	0	9	9	
POWER SUPPLY	POWER SUPPLY OPER & MAINT	OPERATIONS ADMINISTRATION	PIO	2	0	0	2	3	(1)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	PLANNING AND ENGINEERING	PIP	18	0	0	18	21	(3)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	TRAVELING MAINTENANCE	PIT	70	0	0	70	96	(26)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	WAI'AU STATION OPERATIONS	PIW [†]	62	0	0	62	63	(1)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	WAI'AU STATION MAINTENANCE	PIX	26	0	0	26	27	(1)
POWER SUPPLY	POWER SUPPLY SERVICES	SERVICES ADMINISTRATION	PIA	3	0	0	3	3	
POWER SUPPLY	POWER SUPPLY SERVICES	POWER PURCHASE	PIC	6	0	0	6	6	
POWER SUPPLY	POWER SUPPLY SERVICES	FUEL RESOURCES	PIF	4	0	0	4	4	
POWER SUPPLY	POWER SUPPLY SERVICES	GENERATION PLANNING	PYB	9	0	0	9	9	
POWER SUPPLY	POWER SUPPLY SERVICES	TRANSMISSION PLANNING	PYT	7	0	0	7	8	(1)
POWER SUPPLY	VP POWER SUPPLY	VP POWER SUPPLY	P7V	2	0	0	2	2	
POWER SUPPLY		SUBTOTAL		398	0	0	398	449	(51)
PRESIDENT - HECO	CORPORATE AUDIT & COMPLIANCE	INTERNAL AUDIT	PNA	8	0	0	8	8	
PRESIDENT - HECO	CORPORATE AUDIT & COMPLIANCE	ADMINISTRATION	PNX	3	0	0	3	4	(1)
PRESIDENT - HECO	PRESIDENTS OFFICE	PRESIDENTS OFFICE	P9P	2	0	0	2	5	(3)
PRESIDENT - HECO		SUBTOTAL		13	0	0	13	17	(4)
SPECIAL PROJECTS	VP SPECIAL PROJECTS	VP SPECIAL PROJECTS	P2W	3	0	0	3	3	
SPECIAL PROJECTS		SUBTOTAL		3	0	0	3	3	0
SR VP ENERGY SOLUTIONS	CUSTOMER INSTALLATION	ADMINISTRATION	PWA	11	0	0	11	11	
SR VP ENERGY SOLUTIONS	CUSTOMER INSTALLATION	PLANNING & DESIGN	PWP	23	0	0	23	27	(4)
SR VP ENERGY SOLUTIONS	CUSTOMER INSTALLATION	ENGINEERING & METER	PWX	12	0	0	12	15	(3)
SR VP ENERGY SOLUTIONS	ENERGY PROJECTS	ENERGY PROJECTS	PNG	8	0	0	8	9	(1)
SR VP ENERGY SOLUTIONS	SR VP ENERGY SOLUTIONS	SR VP ENERGY SOLUTIONS	P9S	4	0	0	4	4	
SR VP ENERGY SOLUTIONS	TECHNOLOGY	TECHNOLOGY	PNR	2	0	1	3	3	
SR VP ENERGY SOLUTIONS		SUBTOTAL		60	0	1	61	69	(8)
SR VP OPERATIONS	CUSTOMER SERVICE	ADMINISTRATION	PCA	4	0	0	4	5	(1)
SR VP OPERATIONS	CUSTOMER SERVICE	CUST ACCOUNTING & BILLING	PCB	6	0	0	6	6	
SR VP OPERATIONS	CUSTOMER SERVICE	CREDIT	PCD	5	0	0	5	5	
SR VP OPERATIONS	CUSTOMER SERVICE	CUSTOMER FIELD SERVICES	PCF	4	0	0	4	5	(1)
SR VP OPERATIONS	CUSTOMER SERVICE	FIELD SERVICE & COLLECTIONS	PCG	26	0	0	26	27	(1)
SR VP OPERATIONS	CUSTOMER SERVICE	CUSTOMER ASSISTANCE CENTER	PCH	28	0	0	28	30	(2)
SR VP OPERATIONS	CUSTOMER SERVICE	METER READING	PCM	33	0	0	33	34	(1)
SR VP OPERATIONS	CUSTOMER SERVICE	PAYMT PROCESS & SUPPORT CTR	PCP	14	0	0	14	17	(3)
SR VP OPERATIONS	CUSTOMER SERVICE	CUSTOMER ACCOUNT SERVICES	PCS	5	0	0	5	5	
SR VP OPERATIONS	SR VP OPERATIONS	SR VP OPERATIONS	P8V	3	0	0	3	3	
SR VP OPERATIONS		SUBTOTAL		128	0	0	128	137	(9)
SR VP PUBLIC AFFAIRS	GOVERNMENTAL RELATIONS	GOVERNMENTAL RELATIONS	PNI	3	0	0	3	3	
SR VP PUBLIC AFFAIRS	SR VP PUBLIC AFFAIRS	SR VP PUBLIC AFFAIRS	P9V	3	0	0	3	2	1
SR VP PUBLIC AFFAIRS		SUBTOTAL		6	0	0	6	5	1
		COMPANY TOTAL		1424	1	5	1430	1571	(141)

Employee counts in Customer Solutions exclude employees covered under the DSM surcharge.

*Forecast Budget count for RA PDS includes RA's PDJ, PDK, PDL & PDU.

†Actual employee count increased due to reinstatement of two employees in PIW.

Hawaiian Electric Company, Inc.
December 31, 2006 Actual Employee Count vs Budget Employee Count

VICE PRESIDENT'S OFFICE	DEPARTMENT NAME	DIVISION NAME	RA	ACTUAL EMPLOYEE COUNT				BUDGET	DIFF
				FULL TIME	PART TIME	TEMP	TOTAL		
CORPORATE EXCELLENCE	COMPENSATION AND BENEFITS	EMPL BENEFITS & HLTH SVCS	PFB	8	0	0	8	10	(2)
CORPORATE EXCELLENCE	COMPENSATION AND BENEFITS	COMPENSATION	PFC	2	0	0	2	2	
CORPORATE EXCELLENCE	COMPENSATION AND BENEFITS	DISABILITY MANAGEMENT	PPW	3	0	0	3	3	
CORPORATE EXCELLENCE	INDUSTRIAL RELATIONS	ADMINISTRATION	PPA	3	0	0	3	3	
CORPORATE EXCELLENCE	INDUSTRIAL RELATIONS	LABOR REL & WAGE ADMIN	PPI	6	0	0	6	6	
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	CORPORATE SAFETY	PFS	12	0	0	12	13	(1)
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	ADMINISTRATION	PHA	2	0	0	2	2	
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	FACILITIES OPERATIONS	PHB	14	0	0	14	15	(1)
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	FACILITIES PLANNING	PHF	7	0	0	7	8	(1)
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	SECURITY	PHS	7	0	0	7	10	(3)
CORPORATE EXCELLENCE	VP CORPORATE EXCELLENCE	VP CORPORATE EXCELLENCE	P6V	2	0	0	2	2	
CORPORATE EXCELLENCE	WORKFORCE STAFFING & DEVELOP	ADMINISTRATION	PFA	3	0	0	3	4	(1)
CORPORATE EXCELLENCE	WORKFORCE STAFFING & DEVELOP	CLIENT SERVICES & CONSULTING	PFD	9	0	1	10	12	(2)
CORPORATE EXCELLENCE	WORKFORCE STAFFING & DEVELOP	ORGANIZ DEV & CONTIN IMPRVMT	PFI	3	0	0	3	4	(1)
CORPORATE EXCELLENCE		SUBTOTAL		81	0	1	82	94	(12)
CORPORATE RELATIONS	CORPORATE COMMUNICATIONS	CORPORATE COMMUNICATIONS	PQC	7	1	0	8	10	(2)
CORPORATE RELATIONS	VP CORPORATE RELATIONS	VP CORPORATE RELATIONS	P1V	3	0	0	3	2	1
CORPORATE RELATIONS		SUBTOTAL		10	1	0	11	12	(1)
CUSTOMER SOLUTIONS	CUSTOMER TECH APPLICATIONS	CUSTOMER TECH APPLICATIONS	PSR	8	0	0	8	10	(2)
CUSTOMER SOLUTIONS	ENERGY SERVICES	ADMINISTRATION	PSA	3	0	0	3	3	
CUSTOMER SOLUTIONS	ENERGY SERVICES	CUSTOMER EFFICIENCY PROGRAM	PSD	10	0	0	10	11	(1)
CUSTOMER SOLUTIONS	ENERGY SERVICES	PRICING	PSP	4	0	0	4	5	(1)
CUSTOMER SOLUTIONS	FORECASTS & RESEARCH	FORECASTS & RESEARCH	PSM	9	0	0	9	10	(1)
CUSTOMER SOLUTIONS	INTEGRATED RESOURCE PLNG	INTEGRATED RESOURCE PLANNING	PYP	6	0	0	6	6	
CUSTOMER SOLUTIONS	MARKETING SERVICES	MARKETING SERVICES	PSN	11	0	0	11	12	(1)
CUSTOMER SOLUTIONS	VP CUSTOMER SOLUTIONS	CUSTOMER SOLUTIONS	P1W	2	0	0	2	2	
CUSTOMER SOLUTIONS		SUBTOTAL		53	0	0	53	59	(6)
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	ADMINISTRATION	PDA	5	0	0	5	7	(2)
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	CONTROL SECTION	PDC	5	0	0	5	8	(3)
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	TRAINING SECTION	PDD	15	0	0	15		15
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	FIELD OPERATION	PDF	24	0	0	24	22	2
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	WEST OVERHEAD	PDJ*	42	0	0	42		
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	EAST OVERHEAD-KOOLAU	PDK*	26	0	0	26		
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	EAST OVERHEAD-WARD	PDL*	39	0	0	39		
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	UNDERGROUND	PDU*	26	0	0	26		
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	OPERATIONS	PDS*	13	0	0	13	180	(34)
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	PLANNING	PDP	23	0	0	23	14	9
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	VEGETATION MANAGEMENT	PDV	2	0	0	2	2	
ENERGY DELIVERY	ENGINEERING	ADMINISTRATION	PBA	7	0	0	7	7	
ENERGY DELIVERY	ENGINEERING	T&D ENGINEERING	PBE	22	0	1	23	26	(3)
ENERGY DELIVERY	ENGINEERING	PROJECT MANAGEMENT	PBP	7	0	0	7	7	
ENERGY DELIVERY	ENGINEERING	STRUCTURAL	PBT	18	0	0	18	18	
ENERGY DELIVERY	ENGINEERING	SUBST, PROTECTION & TELECOM	PBY	21	0	1	22	22	
ENERGY DELIVERY	ENGINEERING	T&D TECHNICAL SERVICES	PBZ	7	0	0	7	10	(3)
ENERGY DELIVERY	SUPPORT SERVICES	ADMINISTRATION	PVA	5	0	0	5	5	
ENERGY DELIVERY	SUPPORT SERVICES	FLEET	PVF	22	0	0	22	25	(3)
ENERGY DELIVERY	SUPPORT SERVICES	ELECTRICAL & WELDING SERVICES	PVL	12	0	0	12	14	(2)
ENERGY DELIVERY	SUPPORT SERVICES	MATERIALS MANAGEMENT	PVM	27	0	0	27	28	(1)
ENERGY DELIVERY	SUPPORT SERVICES	PURCHASING	PVP	14	0	0	14	15	(1)
ENERGY DELIVERY	SYSTEM OPERATION	ADMINISTRATION	PRA	6	0	0	6	6	
ENERGY DELIVERY	SYSTEM OPERATION	COMMUNICATIONS	PRC	8	0	0	8	8	
ENERGY DELIVERY	SYSTEM OPERATION	OPERATING DISPATCH	PRD	22	0	0	22	27	(5)
ENERGY DELIVERY	SYSTEM OPERATION	OPERATING ENGINEERING	PRE	10	0	0	10	14	(4)
ENERGY DELIVERY	SYSTEM OPERATION	INSTRUMENT & CONTROL	PRI	9	0	0	9	9	
ENERGY DELIVERY	SYSTEM OPERATION	RELAY	PRR	10	0	0	10	10	
ENERGY DELIVERY	SYSTEM OPERATION	SUBSTATION	PRS	37	0	0	37	39	(2)
ENERGY DELIVERY	SYSTEM OPERATION	CONSTRUCTION MANAGEMENT	PRX	3	0	0	3	3	
ENERGY DELIVERY	VP ENERGY DELIVERY	VP ENERGY DELIVERY	P2V	2	0	0	2	2	
ENERGY DELIVERY		SUBTOTAL		489	0	2	491	528	(37)
FINANCE	FINANCIAL VICE PRESIDENT	FINANCIAL VICE PRESIDENT	P4V	4	0	0	4	3	1
FINANCE	GENERAL ACCOUNTING	ADMINISTRATION	PAA	6	0	0	6	6	
FINANCE	GENERAL ACCOUNTING	CORPORATE ACCOUNTING	PAC	5	0	0	5	5	
FINANCE	GENERAL ACCOUNTING	COST ACCOUNTING	PAD	10	0	0	10	10	
FINANCE	GENERAL ACCOUNTING	PROPERTY ACCOUNTING	PAT	5	0	0	5	5	
FINANCE	INFO TECHNOLOGY & SVCS	ADMINISTRATION	PEA	2	0	0	2	2	
FINANCE	INFO TECHNOLOGY & SVCS	CUSTOMER CARE	PEC	25	0	0	25	25	
FINANCE	INFO TECHNOLOGY & SVCS	DEVELOPMENT SERVICES	PED	36	0	0	36	38	(2)
FINANCE	INFO TECHNOLOGY & SVCS	INFRASTRUCTURE & OPERATIONS	PEI	22	0	0	22	24	(2)
FINANCE	INFO TECHNOLOGY & SVCS	MAILING SERVICES	PEM	10	0	0	10	9	1
FINANCE	MANAGEMENT ACCTG & FIN SVCS	ADMINISTRATION	PKB	4	0	0	4	4	
FINANCE	MANAGEMENT ACCTG & FIN SVCS	BUDGETS	PKC	7	0	0	7	7	
FINANCE	MANAGEMENT ACCTG & FIN SVCS	FINANCIAL ANALYSIS	PKF	3	0	0	3	3	
FINANCE	MANAGEMENT ACCTG & FIN SVCS	ERP ADMINISTRATION	PKM	3	0	0	3	3	
FINANCE	MANAGEMENT ACCTG & FIN SVCS	TREASURY	PKT	5	0	0	5	5	
FINANCE	RISK MANAGEMENT	RISK MANAGEMENT	PKI	9	0	0	9	9	
FINANCE		SUBTOTAL		156	0	0	156	158	(2)
GENERAL COUNSEL	LEGAL	LEGAL	PNC	11	0	0	11	11	
GENERAL COUNSEL	LEGAL	LAND & RIGHTS OF WAY	PNL	5	0	0	5	5	
GENERAL COUNSEL	VP GENERAL COUNSEL	VP-GENERAL COUNSEL	P5V	2	0	0	2	2	
GENERAL COUNSEL		SUBTOTAL		18	0	0	18	18	0
GOVT & COMMUNITY AFFAIRS	EDUCATION & CONSUMER AFFAIRS	EDUCATION & CONSUMER AFFAIRS	PQE	8	0	0	8	8	
GOVT & COMMUNITY AFFAIRS	REGULATORY AFFAIRS	REGULATORY AFFAIRS	PNP	7	0	0	7	8	(1)
GOVT & COMMUNITY AFFAIRS	VP GOVT & COMMUNITY AFFAIRS	VP GOVT & COMMUNITY AFFAIRS	P3V	7	0	0	7	7	
GOVT & COMMUNITY AFFAIRS		SUBTOTAL		22	0	0	22	23	(1)
POWER SUPPLY	ENVIRONMENTAL	ADMINISTRATION	PJA	4	0	0	4	4	

Hawaiian Electric Company, Inc.
December 31, 2006 Actual Employee Count vs Budget Employee Count

VICE PRESIDENT'S OFFICE	DEPARTMENT NAME	DIVISION NAME	RA	ACTUAL EMPLOYEE COUNT				BUDGET	DIFF
				FULL TIME	PART TIME	TEMP	TOTAL		
POWER SUPPLY	ENVIRONMENTAL	AIR QUALITY & NOISE	PJB	5	0	0	5	6	(1)
POWER SUPPLY	ENVIRONMENTAL	CHEMISTRY	PJC	6	0	0	6	7	(1)
POWER SUPPLY	ENVIRONMENTAL	WATER & HAZARDOUS MATERIAL	PJW	7	0	0	7	7	
POWER SUPPLY	POWER SUPPLY ENGINEERING	ADMINISTRATION	PYA	3	0	0	3	3	
POWER SUPPLY	POWER SUPPLY ENGINEERING	SUPPORT STAFF	PYC	2	0	0	2	2	
POWER SUPPLY	POWER SUPPLY ENGINEERING	PS TECHNICAL SERVICES	PYE	7	0	0	7	9	(2)
POWER SUPPLY	POWER SUPPLY ENGINEERING	POWER PLANT ELECT ENGRG	PYF	10	0	0	10	12	(2)
POWER SUPPLY	POWER SUPPLY ENGINEERING	POWER PLANT DRAFTING	PYG	2	0	0	2	2	
POWER SUPPLY	POWER SUPPLY ENGINEERING	POWER PLANT PROJECT MGT	PYJ	4	0	0	4	5	(1)
POWER SUPPLY	POWER SUPPLY ENGINEERING	POWER PLANT MECH ENGRG	PYM	12	0	0	12	13	(1)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	O&M ADMINISTRATION	PIB	8	0	0	8	10	(2)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	TRAINING	PID	2	0	0	2	2	
POWER SUPPLY	POWER SUPPLY OPER & MAINT	HONOLULU STATION OPERATIONS	PIH	24	0	0	24	26	(2)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	KAHE STATION OPERATIONS	PIK	59	0	0	59	60	(1)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	KAHE STATION MAINTENANCE	PIL	28	0	0	28	28	
POWER SUPPLY	POWER SUPPLY OPER & MAINT	MAINTENANCE ADMINISTRATION	PIM	2	0	0	2	2	
POWER SUPPLY	POWER SUPPLY OPER & MAINT	HONOLULU STATION MAINTENANCE	PIN	9	0	0	9	9	
POWER SUPPLY	POWER SUPPLY OPER & MAINT	OPERATIONS ADMINISTRATION	PIO	2	0	0	2	3	(1)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	PLANNING AND ENGINEERING	PIP	20	0	0	20	21	(1)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	TRAVELING MAINTENANCE	PIT	70	0	0	70	96	(26)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	WAIU STATION OPERATIONS	PIW [†]	63	0	0	63	63	
POWER SUPPLY	POWER SUPPLY OPER & MAINT	WAIU STATION MAINTENANCE	PIX	29	0	0	29	27	2
POWER SUPPLY	POWER SUPPLY SERVICES	SERVICES ADMINISTRATION	PIA	3	0	0	3	3	
POWER SUPPLY	POWER SUPPLY SERVICES	POWER PURCHASE	PIC	6	0	0	6	6	
POWER SUPPLY	POWER SUPPLY SERVICES	FUEL RESOURCES	PIF	3	0	0	3	4	(1)
POWER SUPPLY	POWER SUPPLY SERVICES	GENERATION PLANNING	PYB	9	0	0	9	9	
POWER SUPPLY	POWER SUPPLY SERVICES	TRANSMISSION PLANNING	PYT	7	0	0	7	8	(1)
POWER SUPPLY	VP POWER SUPPLY	VP POWER SUPPLY	P7V	2	0	0	2	2	
POWER SUPPLY		SUBTOTAL		408	0	0	408	449	(41)
PRESIDENT - HECO	CORPORATE AUDIT & COMPLIANCE	INTERNAL AUDIT	PNA	7	0	0	7	8	(1)
PRESIDENT - HECO	CORPORATE AUDIT & COMPLIANCE	ADMINISTRATION	PNX	3	0	0	3	4	(1)
PRESIDENT - HECO	PRESIDENTS OFFICE	PRESIDENTS OFFICE	P9P	2	0	0	2	5	(3)
PRESIDENT - HECO		SUBTOTAL		12	0	0	12	17	(5)
SPECIAL PROJECTS	VP SPECIAL PROJECTS	VP SPECIAL PROJECTS	P2W	3	0	0	3	3	
SPECIAL PROJECTS		SUBTOTAL		3	0	0	3	3	0
SR VP ENERGY SOLUTIONS	CUSTOMER INSTALLATION	ADMINISTRATION	PWA	11	0	0	11	11	
SR VP ENERGY SOLUTIONS	CUSTOMER INSTALLATION	PLANNING & DESIGN	PWP	21	0	0	21	27	(6)
SR VP ENERGY SOLUTIONS	CUSTOMER INSTALLATION	ENGINEERING & METER	PWX	12	0	0	12	15	(3)
SR VP ENERGY SOLUTIONS	ENERGY PROJECTS	ENERGY PROJECTS	PNG	8	0	0	8	9	(1)
SR VP ENERGY SOLUTIONS	SR VP ENERGY SOLUTIONS	SR VP ENERGY SOLUTIONS	P9S	4	0	0	4	4	
SR VP ENERGY SOLUTIONS	TECHNOLOGY	TECHNOLOGY	PNR	2	0	1	3	3	
SR VP ENERGY SOLUTIONS		SUBTOTAL		58	0	1	59	69	(10)
SR VP OPERATIONS	CUSTOMER SERVICE	ADMINISTRATION	PCA	4	0	0	4	5	(1)
SR VP OPERATIONS	CUSTOMER SERVICE	CUST ACCOUNTING & BILLING	PCB	6	0	0	6	6	
SR VP OPERATIONS	CUSTOMER SERVICE	CREDIT	PCD	5	0	0	5	5	
SR VP OPERATIONS	CUSTOMER SERVICE	CUSTOMER FIELD SERVICES	PCF	4	0	0	4	5	(1)
SR VP OPERATIONS	CUSTOMER SERVICE	FIELD SERVICE & COLLECTIONS	PCG	26	0	0	26	27	(1)
SR VP OPERATIONS	CUSTOMER SERVICE	CUSTOMER ASSISTANCE CENTER	PCH	27	0	0	27	30	(3)
SR VP OPERATIONS	CUSTOMER SERVICE	METER READING	PCM	33	0	0	33	34	(1)
SR VP OPERATIONS	CUSTOMER SERVICE	PAYMT PROCESS & SUPPORT CTR	PCP	16	0	0	16	17	(1)
SR VP OPERATIONS	CUSTOMER SERVICE	CUSTOMER ACCOUNT SERVICES	PCS	5	0	0	5	5	
SR VP OPERATIONS	SR VP OPERATIONS	SR VP OPERATIONS	P8V	3	0	0	3	3	
SR VP OPERATIONS		SUBTOTAL		129	0	0	129	137	(8)
SR VP PUBLIC AFFAIRS	GOVERNMENTAL RELATIONS	GOVERNMENTAL RELATIONS	PNI	2	0	0	2	3	(1)
SR VP PUBLIC AFFAIRS	SR VP PUBLIC AFFAIRS	SR VP PUBLIC AFFAIRS	P9V	3	0	0	3	2	1
SR VP PUBLIC AFFAIRS		SUBTOTAL		5	0	0	5	5	0
		COMPANY TOTAL		1444	1	4	1449	1572	(123)

Employee counts in Customer Solutions exclude employees covered under the DSM surcharge.

*Forecast Budget count for RA PDS includes RA's PDJ, PDK, PDL & PDU.

†Actual employee count increased due to reinstatement of two employees in PIW.

Hawaiian Electric Company, Inc.
March 31, 2007 Actual Employee Count vs Budget Employee Count

VICE PRESIDENT'S OFFICE	DEPARTMENT NAME	DIVISION NAME	RA	ACTUAL EMPLOYEE COUNT				BUDGET	DIFF
				FULL TIME	PART TIME	TEMP	TOTAL		
CORPORATE EXCELLENCE	COMPENSATION AND BENEFITS	EMPL BENEFITS & HLTH SVCS	PFB	8	0	0	8	10	(2)
CORPORATE EXCELLENCE	COMPENSATION AND BENEFITS	COMPENSATION	PFC	2	0	0	2	2	
CORPORATE EXCELLENCE	COMPENSATION AND BENEFITS	DISABILITY MANAGEMENT	PPW	3	0	0	3	3	
CORPORATE EXCELLENCE	INDUSTRIAL RELATIONS	ADMINISTRATION	PPA	3	0	0	3	3	
CORPORATE EXCELLENCE	INDUSTRIAL RELATIONS	LABOR REL & WAGE ADMIN	PPI	6	0	0	6	6	
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	CORPORATE SAFETY	PFS	11	0	0	11	12	(1)
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	ADMINISTRATION	PHA	2	0	0	2	2	
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	FACILITIES OPERATIONS	PHB	14	0	0	14	15	(1)
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	FACILITIES PLANNING	PHF	7	0	0	7	8	(1)
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	SECURITY	PHS	7	0	0	7	10	(3)
CORPORATE EXCELLENCE	VP CORPORATE EXCELLENCE	VP CORPORATE EXCELLENCE	P6V	2	0	0	2	2	
CORPORATE EXCELLENCE	WORKFORCE STAFFING & DEVELOP	ADMINISTRATION	PFA	4	0	0	4	4	
CORPORATE EXCELLENCE	WORKFORCE STAFFING & DEVELOP	CLIENT SERVICES & CONSULTING	PFD	10	0	0	10	10	
CORPORATE EXCELLENCE	WORKFORCE STAFFING & DEVELOP	ORGANIZ DEV & CONTIN IMPRVMT	PFI	2	0	0	2	3	(1)
CORPORATE EXCELLENCE		SUBTOTAL		81	0	0	81	90	(9)
CORPORATE RELATIONS	CORPORATE COMMUNICATIONS	CORPORATE COMMUNICATIONS	PQC	7	1	0	8	9	(1)
CORPORATE RELATIONS	VP CORPORATE RELATIONS	VP CORPORATE RELATIONS	P1V	3	0	0	3	3	
CORPORATE RELATIONS		SUBTOTAL		10	1	0	11	12	(1)
CUSTOMER SOLUTIONS	CUSTOMER TECH APPLICATIONS	CUSTOMER TECH APPLICATIONS	PSR	8	0	0	8	10	(2)
CUSTOMER SOLUTIONS	ENERGY SERVICES	ADMINISTRATION	PSA	3	0	0	3	3	
CUSTOMER SOLUTIONS	ENERGY SERVICES	CUSTOMER EFFICIENCY PROGRAM	PSD**	5	0	0	5	5	0
CUSTOMER SOLUTIONS	ENERGY SERVICES	PRICING	PSP	4	0	0	4	5	(1)
CUSTOMER SOLUTIONS	FORECASTS & RESEARCH	FORECASTS & RESEARCH	PSM	10	0	0	10	10	
CUSTOMER SOLUTIONS	MARKETING SERVICES	MARKETING SERVICES	PSN	12	0	0	12	12	
CUSTOMER SOLUTIONS	VP CUSTOMER SOLUTIONS	CUSTOMER SOLUTIONS	P1W	2	0	0	2	2	
CUSTOMER SOLUTIONS		SUBTOTAL		44	0	0	44	47	(3)
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	ADMINISTRATION	PDA	5	0	0	5	6	(1)
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	CONTROL SECTION	PDC	5	0	0	5	8	(3)
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	TRAINING SECTION	PDD	17	0	0	17		17
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	FIELD OPERATION	PDF	23	0	0	23	22	1
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	WEST OVERHEAD	PDJ*	40	0	0	40		
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	EAST OVERHEAD-KOOLAU	PDK*	25	0	0	25		
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	EAST OVERHEAD-WARD	PDL*	38	0	0	38		
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	UNDERGROUND	PDU*	27	0	0	27		
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	OPERATIONS	PDS*	13	0	0	13	170	(27)
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	PLANNING	PDP	23	0	0	23	13	10
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	VEGETATION MANAGEMENT	PDV	2	0	0	2	1	1
ENERGY DELIVERY	ENGINEERING	ADMINISTRATION	PBA	7	0	0	7	7	
ENERGY DELIVERY	ENGINEERING	T&D ENGINEERING	PBE	22	0	1	23	23	
ENERGY DELIVERY	ENGINEERING	PROJECT MANAGEMENT	PBP	7	0	0	7	7	
ENERGY DELIVERY	ENGINEERING	STRUCTURAL	PBT	18	0	0	18	18	
ENERGY DELIVERY	ENGINEERING	SUBST, PROTECTION & TELECOM	PBY	20	0	1	21	22	(1)
ENERGY DELIVERY	ENGINEERING	T&D TECHNICAL SERVICES	PBZ	8	0	0	8	8	
ENERGY DELIVERY	SUPPORT SERVICES	ADMINISTRATION	PVA	5	0	0	5	5	
ENERGY DELIVERY	SUPPORT SERVICES	FLEET	PVF	22	0	0	22	25	(3)
ENERGY DELIVERY	SUPPORT SERVICES	ELECTRICAL & WELDING SERVICES	PVL	12	0	0	12	12	
ENERGY DELIVERY	SUPPORT SERVICES	MATERIALS MANAGEMENT	PVM	27	0	0	27	28	(1)
ENERGY DELIVERY	SUPPORT SERVICES	PURCHASING	PVP	15	0	0	15	15	
ENERGY DELIVERY	SYSTEM OPERATION	ADMINISTRATION	PRA	7	0	0	7	7	
ENERGY DELIVERY	SYSTEM OPERATION	COMMUNICATIONS	PRC	8	0	0	8	8	
ENERGY DELIVERY	SYSTEM OPERATION	OPERATING DISPATCH	PRD	22	0	0	22	27	(5)
ENERGY DELIVERY	SYSTEM OPERATION	OPERATING ENGINEERING	PRE	11	0	0	11	14	(3)
ENERGY DELIVERY	SYSTEM OPERATION	INSTRUMENT & CONTROL	PRI	9	0	0	9	9	
ENERGY DELIVERY	SYSTEM OPERATION	RELAY	PRR	10	0	0	10	10	
ENERGY DELIVERY	SYSTEM OPERATION	SUBSTATION	PRS	38	0	0	38	39	(1)
ENERGY DELIVERY	SYSTEM OPERATION	CONSTRUCTION MANAGEMENT	PRX	3	0	0	3	3	
ENERGY DELIVERY	VP ENERGY DELIVERY	VP ENERGY DELIVERY	P2V	2	0	0	2	2	
ENERGY DELIVERY		SUBTOTAL		491	0	2	493	509	(16)
FINANCE	FINANCIAL VICE PRESIDENT	FINANCIAL VICE PRESIDENT	P4V	4	0	0	4	4	
FINANCE	GENERAL ACCOUNTING	ADMINISTRATION	PAA	5	0	0	5	6	(1)
FINANCE	GENERAL ACCOUNTING	CORPORATE ACCOUNTING	PAC	5	0	0	5	5	
FINANCE	GENERAL ACCOUNTING	COST ACCOUNTING	PAD	8	0	0	8	10	(2)
FINANCE	GENERAL ACCOUNTING	PROPERTY ACCOUNTING	PAT	5	0	0	5	5	
FINANCE	INFO TECHNOLOGY & SVCS	ADMINISTRATION	PEA	2	0	0	2	2	
FINANCE	INFO TECHNOLOGY & SVCS	CUSTOMER CARE	PEC	25	0	0	25	23	2
FINANCE	INFO TECHNOLOGY & SVCS	DEVELOPMENT SERVICES	PED	35	0	0	35	37	(2)
FINANCE	INFO TECHNOLOGY & SVCS	INFRASTRUCTURE & OPERATIONS	PEI	22	0	0	22	24	(2)
FINANCE	INFO TECHNOLOGY & SVCS	MAILING SERVICES	PEM	7	0	0	7	8	(1)
FINANCE	MANAGEMENT ACCTG & FIN SVCS	ADMINISTRATION	PKB	4	0	0	4	4	
FINANCE	MANAGEMENT ACCTG & FIN SVCS	BUDGETS	PKC	7	0	0	7	7	
FINANCE	MANAGEMENT ACCTG & FIN SVCS	FINANCIAL ANALYSIS	PKF	3	0	0	3	3	
FINANCE	MANAGEMENT ACCTG & FIN SVCS	ERP ADMINISTRATION	PKM	3	0	0	3	3	
FINANCE	MANAGEMENT ACCTG & FIN SVCS	TREASURY	PKT	5	0	0	5	5	
FINANCE	RISK MANAGEMENT	RISK MANAGEMENT	PKI	9	0	0	9	9	
FINANCE		SUBTOTAL		149	0	0	149	155	(6)
GENERAL COUNSEL	LEGAL	LEGAL	PNC	12	0	0	12	11	1
GENERAL COUNSEL	LEGAL	LAND & RIGHTS OF WAY	PNL	5	0	0	5	5	
GENERAL COUNSEL	VP GENERAL COUNSEL	VP-GENERAL COUNSEL	P5V	2	0	0	2	2	
GENERAL COUNSEL				19	0	0	19	18	1
GOVT & COMMUNITY AFFAIRS	EDUCATION & CONSUMER AFFAIRS	EDUCATION & CONSUMER AFFAIRS	PQE	6	0	0	6	8	(2)
GOVT & COMMUNITY AFFAIRS	REGULATORY AFFAIRS	REGULATORY AFFAIRS	PNP	8	0	0	8	8	
GOVT & COMMUNITY AFFAIRS	VP GOVT & COMMUNITY AFFAIRS	VP GOVT & COMMUNITY AFFAIRS	P3V	7	0	0	7	7	
GOVT & COMMUNITY AFFAIRS		SUBTOTAL		21	0	0	21	23	(2)
POWER SUPPLY	ENVIRONMENTAL	ADMINISTRATION	PJA	4	0	0	4	4	

Hawaiian Electric Company, Inc.
March 31, 2007 Actual Employee Count vs Budget Employee Count

VICE PRESIDENT'S OFFICE	DEPARTMENT NAME	DIVISION NAME	RA	ACTUAL EMPLOYEE COUNT				BUDGET	DIFF
				FULL TIME	PART TIME	TEMP	TOTAL		
POWER SUPPLY	ENVIRONMENTAL	AIR QUALITY & NOISE	PJB	5	0	0	5	6	(1)
POWER SUPPLY	ENVIRONMENTAL	CHEMISTRY	PJC	6	0	0	6	6	
POWER SUPPLY	ENVIRONMENTAL	WATER & HAZARDOUS MATERIAL	PJW	7	0	0	7	8	(1)
POWER SUPPLY	POWER SUPPLY ENGINEERING	ADMINISTRATION	PYA	3	0	0	3	3	
POWER SUPPLY	POWER SUPPLY ENGINEERING	SUPPORT STAFF	PYC	2	0	0	2	2	
POWER SUPPLY	POWER SUPPLY ENGINEERING	PS TECHNICAL SERVICES	PYE	8	0	0	8	8	
POWER SUPPLY	POWER SUPPLY ENGINEERING	POWER PLANT ELECT ENGRG	PYF	10	0	0	10	12	(2)
POWER SUPPLY	POWER SUPPLY ENGINEERING	POWER PLANT DRAFTING	PYG	2	0	0	2	2	
POWER SUPPLY	POWER SUPPLY ENGINEERING	POWER PLANT PROJECT MGT	PYJ	4	0	0	4	5	(1)
POWER SUPPLY	POWER SUPPLY ENGINEERING	POWR PLANT MECH ENGRG	PYM	13	0	0	13	13	
POWER SUPPLY	POWER SUPPLY OPER & MAINT	O&M ADMINISTRATION	PIB	8	0	0	8	8	
POWER SUPPLY	POWER SUPPLY OPER & MAINT	TRAINING	PID	2	0	0	2	3	(1)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	HONOLULU STATION OPERATIONS	PIH	25	0	0	25	27	(2)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	KAHE STATION OPERATIONS	PIK	60	0	0	60	61	(1)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	KAHE STATION MAINTENANCE	PIL	28	0	0	28	33	(5)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	MAINTENANCE ADMINISTRATION	PIM	2	0	0	2	3	(1)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	HONOLULU STATION MAINTENANCE	PIN	10	0	0	10	12	(2)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	OPERATIONS ADMINISTRATION	PIO	2	0	0	2	2	
POWER SUPPLY	POWER SUPPLY OPER & MAINT	PLANNING AND ENGINEERING	PIP	20	0	0	20	24	(4)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	TRAVELING MAINTENANCE	PIT	69	0	0	69	81	(12)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	WAI'AU STATION OPERATIONS	PIW [†]	64	0	0	64	66	(2)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	WAI'AU STATION MAINTENANCE	PIX	29	0	0	29	32	(3)
POWER SUPPLY	POWER SUPPLY SERVICES	SERVICES ADMINISTRATION	PIA	3	0	0	3	3	
POWER SUPPLY	POWER SUPPLY SERVICES	POWER PURCHASE	PIC	6	0	0	6	6	
POWER SUPPLY	POWER SUPPLY SERVICES	FUEL RESOURCES	PIF	3	0	0	3	4	(1)
POWER SUPPLY	POWER SUPPLY SERVICES	FUEL INFRASTRUCTURE	PIJ	0	0	0	0	2	(2)
POWER SUPPLY	SYSTEM PLANNING	ADMINISTRATION	PXA	2	0	0	2	2	
POWER SUPPLY	SYSTEM PLANNING	GENERATION PLANNING	PYB	9	0	0	9	9	
POWER SUPPLY	SYSTEM PLANNING	TRANSMISSION PLANNING	PYT	8	0	0	8	8	
POWER SUPPLY	VP POWER SUPPLY	VP POWER SUPPLY	P7V	2	0	0	2	2	
POWER SUPPLY		SUBTOTAL		416	0	0	416	457	(41)
PRESIDENT - HECO	CORPORATE AUDIT & COMPLIANCE	INTERNAL AUDIT	PNA	8	0	0	8	8	
PRESIDENT - HECO	CORPORATE AUDIT & COMPLIANCE	ADMINISTRATION	PNX	3	0	0	3	4	(1)
PRESIDENT - HECO	PRESIDENTS OFFICE	PRESIDENTS OFFICE	P9P	2	0	0	2	3	(1)
PRESIDENT - HECO		SUBTOTAL		13	0	0	13	15	(2)
SPECIAL PROJECTS	VP SPECIAL PROJECTS	VP SPECIAL PROJECTS	P2W	0	0	0	0	1	(1)
SPECIAL PROJECTS		SUBTOTAL		0	0	0	0	1	(1)
SR VP ENERGY SOLUTIONS	CUSTOMER INSTALLATION	ADMINISTRATION	PWA	11	0	0	11	12	(1)
SR VP ENERGY SOLUTIONS	CUSTOMER INSTALLATION	PLANNING & DESIGN	PWP	21	0	0	21	27	(6)
SR VP ENERGY SOLUTIONS	CUSTOMER INSTALLATION	ENGINEERING & METER	PWX	12	0	0	12	14	(2)
SR VP ENERGY SOLUTIONS	ENERGY PROJECTS	ENERGY PROJECTS	PNG	9	0	0	9	9	
SR VP ENERGY SOLUTIONS	SR VP ENERGY SOLUTIONS	SR VP ENERGY SOLUTIONS	P9S	4	0	0	4	4	
SR VP ENERGY SOLUTIONS	TECHNOLOGY	TECHNOLOGY	PNR	2	0	1	3	3	
SR VP ENERGY SOLUTIONS		SUBTOTAL		59	0	1	60	69	(9)
SR VP OPERATIONS	CUSTOMER SERVICE	ADMINISTRATION	PCA	3	0	0	3	4	(1)
SR VP OPERATIONS	CUSTOMER SERVICE	CUST ACCOUNTING & BILLING	PCB	6	0	0	6	6	
SR VP OPERATIONS	CUSTOMER SERVICE	CREDIT	PCD	5	0	0	5	5	
SR VP OPERATIONS	CUSTOMER SERVICE	CUSTOMER FIELD SERVICES	PCF	4	0	0	4	4	
SR VP OPERATIONS	CUSTOMER SERVICE	FIELD SERVICE & COLLECTIONS	PCG	26	0	0	26	26	
SR VP OPERATIONS	CUSTOMER SERVICE	CUSTOMER ASSISTANCE CENTER	PCH	28	0	0	28	30	(2)
SR VP OPERATIONS	CUSTOMER SERVICE	METER READING	PCM	34	0	0	34	34	
SR VP OPERATIONS	CUSTOMER SERVICE	PAYMT PROCESS & SUPPORT CTR	PCP	16	0	1	17	17	
SR VP OPERATIONS	CUSTOMER SERVICE	CUSTOMER ACCOUNT SERVICES	PCS	5	0	0	5	5	
SR VP OPERATIONS	SR VP OPERATIONS	SR VP OPERATIONS	P8V	2	0	0	2	2	
SR VP OPERATIONS		SUBTOTAL		129	0	1	130	133	(3)
SR VP PUBLIC AFFAIRS	GOVERNMENTAL RELATIONS	GOVERNMENTAL RELATIONS	PNI	2	0	1	3	3	
SR VP PUBLIC AFFAIRS	INTEGRATED RESOURCE PLNG	INTEGRATED RESOURCE PLANNING	PYP	6	0	0	6	6	
SR VP PUBLIC AFFAIRS	SR VP PUBLIC AFFAIRS	SR VP PUBLIC AFFAIRS	P9V	3	0	0	3	3	
SR VP PUBLIC AFFAIRS		SUBTOTAL		11	0	1	12	12	0
		COMPANY TOTAL		1443	1	5	1449	1541	(92)

*Forecast Budget count for RA PDS includes RA's PDJ, PDK, PDL & PDU.

**Employee counts in Customer Solutions exclude employees covered under the DSM surcharge.

†Actual employee count increased due to reinstatement of two employees in PIW.

Hawaiian Electric Company, Inc.
June 30, 2007 Actual Employee Count vs Budget Employee Count

VICE PRESIDENT'S OFFICE	DEPARTMENT NAME	DIVISION NAME	RA	ACTUAL EMPLOYEE COUNT					
				FULL TIME	PART TIME	TEMP	TOTAL	BUDGET	DIFF
CORPORATE EXCELLENCE	COMPENSATION AND BENEFITS	EMPL BENEFITS & HLTH SVCS	PFB	8	0	0	8	10	(2)
CORPORATE EXCELLENCE	COMPENSATION AND BENEFITS	COMPENSATION	PFC	2	0	0	2	2	0
CORPORATE EXCELLENCE	COMPENSATION AND BENEFITS	WORKERS COMPENSATION	PPW	4	0	0	4	3	1
CORPORATE EXCELLENCE	INDUSTRIAL RELATIONS	ADMINISTRATION	PPA	3	0	0	3	3	0
CORPORATE EXCELLENCE	INDUSTRIAL RELATIONS	LABOR REL & WAGE ADMIN	PPI	5	0	0	5	6	(1)
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	CORPORATE SAFETY	PFS	11	0	0	11	12	(1)
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	ADMINISTRATION	PHA	2	0	0	2	2	0
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	FACILITIES OPERATIONS	PHB	14	0	0	14	15	(1)
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	FACILITIES PLANNING	PHF	8	0	0	8	8	0
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	SECURITY	PHS	7	0	0	7	10	(3)
CORPORATE EXCELLENCE	VP CORPORATE EXCELLENCE	VP CORPORATE EXCELLENCE	P6V	2	0	0	2	2	0
CORPORATE EXCELLENCE	WORKFORCE STAFFING & DEVELOP	ADMINISTRATION	PFA	4	0	0	4	4	0
CORPORATE EXCELLENCE	WORKFORCE STAFFING & DEVELOP	CLIENT SERVICES & CONSULTING	PFD	9	0	0	9	10	(1)
CORPORATE EXCELLENCE	WORKFORCE STAFFING & DEVELOP	ORGANIZ DEV & CONTIN IMPRVMT	PFI	3	0	0	3	3	0
CORPORATE EXCELLENCE		SUBTOTAL		82	0	0	82	90	(8)
CORPORATE RELATIONS	CORPORATE COMMUNICATIONS	CORPORATE COMMUNICATIONS	PQC	7	1	0	8	10	(2)
CORPORATE RELATIONS	VP CORPORATE RELATIONS	VP CORPORATE RELATIONS	P1V	3	0	0	3	2	1
CORPORATE RELATIONS		SUBTOTAL		10	1	0	11	12	(1)
CUSTOMER SOLUTIONS	CUSTOMER TECH APPLICATIONS	CUSTOMER TECH APPLICATIONS	PSR	8	0	0	8	10	(2)
CUSTOMER SOLUTIONS	ENERGY SERVICES	ADMINISTRATION	PSA	3	0	0	3	3	0
CUSTOMER SOLUTIONS	ENERGY SERVICES	CUSTOMER EFFICIENCY PROGRAM	PSD**	5	0	0	5	5	0
CUSTOMER SOLUTIONS	ENERGY SERVICES	PRICING	PSP	4	0	0	4	5	(1)
CUSTOMER SOLUTIONS	FORECASTS & RESEARCH	FORECASTS & RESEARCH	PSM	10	0	0	10	10	0
CUSTOMER SOLUTIONS	MARKETING SERVICES	MARKETING SERVICES	PSN	11	0	0	11	12	(1)
CUSTOMER SOLUTIONS	VP CUSTOMER SOLUTIONS	CUSTOMER SOLUTIONS	P1W	2	0	0	2	2	0
CUSTOMER SOLUTIONS		SUBTOTAL		43	0	0	43	47	(4)
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	ADMINISTRATION	PDA	5	0	0	5	6	(1)
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	CONTROL SECTION	PDC	5	0	0	5	8	(3)
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	TRAINING SECTION	PDD	8	0	0	8		8
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	FIELD OPERATION	PDF	22	0	0	22	22	0
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	WEST OVERHEAD	PDJ*	43	0	0	43		
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	EAST OVERHEAD-KOOLAU	PDK*	27	0	0	27		
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	EAST OVERHEAD-WARD	PDL *	40	0	0	40		
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	PLANNING	PDP	23	0	2	25	13	12
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	OPERATIONS	PDS*	12	0	0	12	170	(21)
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	UNDERGROUND	PDU*	27	0	0	27		
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	VEGETATION MANAGEMENT	PDV	2	0	0	2	1	1
ENERGY DELIVERY	ENGINEERING	ADMINISTRATION	PBA	7	0	0	7	7	0
ENERGY DELIVERY	ENGINEERING	T&D ENGINEERING	PBE	23	0	2	25	23	2
ENERGY DELIVERY	ENGINEERING	PROJECT MANAGEMENT	PBP	10	0	0	10	7	3
ENERGY DELIVERY	ENGINEERING	STRUCTURAL	PBT	18	0	1	19	18	1
ENERGY DELIVERY	ENGINEERING	SUBST.PROTECTION&TELECOM	PBY	23	0	1	24	22	2
ENERGY DELIVERY	ENGINEERING	T&D TECHNICAL SERVICES	PBZ	8	0	1	9	8	1
ENERGY DELIVERY	SUPPORT SERVICES	ADMINISTRATION	PVA	5	0	0	5	5	0
ENERGY DELIVERY	SUPPORT SERVICES	FLEET	PVF	23	0	0	23	25	(2)
ENERGY DELIVERY	SUPPORT SERVICES	ELECTRICAL & WELDING SERVICES	PVL	12	0	0	12	12	0
ENERGY DELIVERY	SUPPORT SERVICES	MATERIALS MANAGEMENT	PVM	27	0	0	27	28	(1)
ENERGY DELIVERY	SUPPORT SERVICES	PURCHASING	PVP	15	0	0	15	15	0
ENERGY DELIVERY	SYSTEM OPERATION	ADMINISTRATION	PRA	7	0	0	7	7	0
ENERGY DELIVERY	SYSTEM OPERATION	COMMUNICATIONS	PRC	8	0	0	8	8	0
ENERGY DELIVERY	SYSTEM OPERATION	OPERATING DISPATCH	PRD	24	0	1	25	27	(2)
ENERGY DELIVERY	SYSTEM OPERATION	OPERATING ENGINEERING	PRE	11	0	1	12	14	(2)
ENERGY DELIVERY	SYSTEM OPERATION	INSTRUMENT & CONTROL	PRI	9	0	0	9	9	0
ENERGY DELIVERY	SYSTEM OPERATION	RELAY	PRR	10	0	0	10	10	0
ENERGY DELIVERY	SYSTEM OPERATION	SUBSTATION	PRS	37	0	0	37	39	(2)
ENERGY DELIVERY	SYSTEM OPERATION	CONSTRUCTION MANAGEMENT	PRX	3	0	0	3	3	0
ENERGY DELIVERY	VP ENERGY DELIVERY	VP ENERGY DELIVERY	P2V	2	0	0	2	2	0
ENERGY DELIVERY		SUBTOTAL		496	0	9	505	509	(4)
ENERGY SOLUTIONS	CUSTOMER INSTALLATION	ADMINISTRATION	PWA	12	0	0	12	12	0
ENERGY SOLUTIONS	CUSTOMER INSTALLATION	PLANNING & DESIGN	PWP	21	0	0	21	28	(7)
ENERGY SOLUTIONS	CUSTOMER INSTALLATION	ENGINEERING & METER	PWX	11	0	0	11	14	(3)
ENERGY SOLUTIONS	ENERGY PROJECTS	ENERGY PROJECTS	PNG	9	0	0	9	9	0
ENERGY SOLUTIONS	SR VP ENERGY SOLUTIONS	SR VP ENERGY SOLUTIONS	P9S	4	0	0	4	4	0
ENERGY SOLUTIONS	TECHNOLOGY	TECHNOLOGY	PNR	2	0	1	3	3	0
ENERGY SOLUTIONS		SUBTOTAL		59	0	1	60	70	(10)
FINANCE & ADMIN	GENERAL ACCOUNTING	ADMINISTRATION	PAA	6	0	0	6	6	0
FINANCE & ADMIN	GENERAL ACCOUNTING	CORPORATE ACCOUNTING	PAC	5	0	0	5	5	0
FINANCE & ADMIN	GENERAL ACCOUNTING	COST ACCOUNTING	PAD	9	0	0	9	10	(1)
FINANCE & ADMIN	GENERAL ACCOUNTING	PROPERTY ACCOUNTING	PAT	5	0	0	5	5	0
FINANCE & ADMIN	INFO TECHNOLOGY & SVCS	ADMINISTRATION	PEA	2	0	0	2	2	0
FINANCE & ADMIN	INFO TECHNOLOGY & SVCS	CUSTOMER CARE	PEC	25	0	0	25	23	2
FINANCE & ADMIN	INFO TECHNOLOGY & SVCS	DEVELOPMENT SERVICES	PED	35	0	0	35	37	(2)
FINANCE & ADMIN	INFO TECHNOLOGY & SVCS	INFRASTRUCTURE & OPERATIONS	PEI	22	0	0	22	24	(2)
FINANCE & ADMIN	INFO TECHNOLOGY & SVCS	MAILING SERVICES	PEM	7	0	2	9	8	1
FINANCE & ADMIN	MANAGEMENT ACCTG & FIN SVCS	ADMINISTRATION	PKB	4	0	0	4	4	0

Hawaiian Electric Company, Inc.
June 30, 2007 Actual Employee Count vs Budget Employee Count

VICE PRESIDENT'S OFFICE	DEPARTMENT NAME	DIVISION NAME	RA	ACTUAL EMPLOYEE COUNT					
				FULL TIME	PART TIME	TEMP	TOTAL	BUDGET	DIFF
FINANCE & ADMIN	MANAGEMENT ACCTG & FIN SVCS	BUDGETS	PKC	7	0	0	7	7	0
FINANCE & ADMIN	MANAGEMENT ACCTG & FIN SVCS	FINANCIAL ANALYSIS	PKF	3	0	0	3	3	0
FINANCE & ADMIN	MANAGEMENT ACCTG & FIN SVCS	ERP ADMINISTRATION	PKM	3	0	0	3	3	0
FINANCE & ADMIN	MANAGEMENT ACCTG & FIN SVCS	TREASURY	PKT	3	0	0	3	5	(2)
FINANCE & ADMIN	RISK MANAGEMENT	RISK MANAGEMENT	PKI	9	0	0	9	9	0
FINANCE & ADMIN	SR VP FINANCE & ADMIN	SR VP FINANCE & ADMIN	P4V	4	0	0	4	3	1
FINANCE & ADMIN		SUBTOTAL		149	0	2	151	154	(3)
GENERAL COUNSEL	LEGAL	LEGAL	PNC	12	0	0	12	11	1
GENERAL COUNSEL	LEGAL	LAND & RIGHTS OF WAY	PNL	5	0	0	5	5	0
GENERAL COUNSEL	VP GENERAL COUNSEL	VP-GENERAL COUNSEL	P5V	2	0	0	2	2	0
GENERAL COUNSEL		SUBTOTAL		19	0	0	19	18	1
GOVT & COMMUNITY AFFAIRS	EDUCATION & CONSUMER AFFAIRS	EDUCATION & CONSUMER AFFAIRS	PQE	6	0	0	6	8	(2)
GOVT & COMMUNITY AFFAIRS	REGULATORY AFFAIRS	REGULATORY AFFAIRS	PNP	10	0	0	10	8	2
GOVT&COMMUNITY AFFRS	VP GOVT & COMMUNITY AFFAIRS	VP GOVT & COMMUNITY AFFAIRS	P3V	7	0	1	8	7	1
GOVT & COMMUNITY AFFAIRS		SUBTOTAL		23	0	1	24	23	1
OPERATIONS	CUSTOMER SERVICE	ADMINISTRATION	PCA	4	0	0	4	4	0
OPERATIONS	CUSTOMER SERVICE	CUST ACCOUNTING & BILLING	PCB	6	0	0	6	6	0
OPERATIONS	CUSTOMER SERVICE	CREDIT	PCD	5	0	0	5	5	0
OPERATIONS	CUSTOMER SERVICE	CUSTOMER FIELD SERVICES	PCF	4	0	1	5	4	1
OPERATIONS	CUSTOMER SERVICE	FIELD SERVICE & COLLECTIONS	PCG	26	0	0	26	26	0
OPERATIONS	CUSTOMER SERVICE	CUSTOMER ASSISTANCE CENTER	PCH	31	0	0	31	30	1
OPERATIONS	CUSTOMER SERVICE	METER READING	PCM	34	0	2	36	34	2
OPERATIONS	CUSTOMER SERVICE	PAYMT PROCESS & SUPPORT CTR	PCP	17	0	0	17	17	0
OPERATIONS	CUSTOMER SERVICE	CUSTOMER ACCOUNT SERVICES	PCS	5	0	0	5	5	0
OPERATIONS	SR VP OPERATIONS	SR VP OPERATIONS	P8V	2	0	0	2	3	(1)
OPERATIONS		SUBTOTAL		134	0	3	137	134	3
POWER SUPPLY	ENVIRONMENTAL	ADMINISTRATION	PJA	4	0	0	4	4	0
POWER SUPPLY	ENVIRONMENTAL	AIR QUALITY & NOISE	PJB	4	0	0	4	6	(2)
POWER SUPPLY	ENVIRONMENTAL	CHEMISTRY	PJC	5	0	0	5	6	(1)
POWER SUPPLY	ENVIRONMENTAL	WATER & HAZARDOUS MATERIAL	PJW	7	0	0	7	8	(1)
POWER SUPPLY	POWER SUPPLY ENGINEERING	ADMINISTRATION	PYA	3	0	0	3	3	0
POWER SUPPLY	POWER SUPPLY ENGINEERING	SUPPORT STAFF	PYC	2	0	0	2	2	0
POWER SUPPLY	POWER SUPPLY ENGINEERING	PS TECHNICAL SERVICES	PYE	8	0	0	8	9	(1)
POWER SUPPLY	POWER SUPPLY ENGINEERING	POWER PLANT ELECT ENGRG	PYF	10	0	1	11	12	(1)
POWER SUPPLY	POWER SUPPLY ENGINEERING	POWER PLANT DRAFTING	PYG	2	0	0	2	2	0
POWER SUPPLY	POWER SUPPLY ENGINEERING	POWER PLANT PROJECT MGT	PYJ	4	0	0	4	5	(1)
POWER SUPPLY	POWER SUPPLY ENGINEERING	POWER PLANT MECH ENGRG	PYM	13	0	1	14	13	1
POWER SUPPLY	POWER SUPPLY OPER & MAINT	O&M ADMINISTRATION	PIB	9	0	0	9	11	(2)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	TRAINING	PID	2	0	0	2		2
POWER SUPPLY	POWER SUPPLY OPER & MAINT	HONOLULU STATION OPERATIONS	PIH	25	0	0	25	27	(2)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	KAHE STATION OPERATIONS	PIK	60	0	0	60	61	(1)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	KAHE STATION MAINTENANCE	PIL	29	0	0	29	33	(4)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	MAINTENANCE ADMINISTRATION	PIM	2	0	0	2	3	(1)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	HONOLULU STATION MAINTENANCE	PIN	12	0	0	12	12	0
POWER SUPPLY	POWER SUPPLY OPER & MAINT	OPERATIONS ADMINISTRATION	PIO	2	0	0	2	4	(2)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	PLANNING AND ENGINEERING	PIP	21	0	3	24	21	3
POWER SUPPLY	POWER SUPPLY OPER & MAINT	TRAVELING MAINTENANCE	PIT	72	0	0	72	82	(10)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	WAI'AU STATION OPERATIONS	PIW [†]	65	0	0	65	66	(1)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	WAI'AU STATION MAINTENANCE	PIX	30	0	0	30	32	(2)
POWER SUPPLY	POWER SUPPLY SERVICES	SERVICES ADMINISTRATION	PIA	3	0	0	3	3	0
POWER SUPPLY	POWER SUPPLY SERVICES	POWER PURCHASE	PIC	6	0	0	6	6	0
POWER SUPPLY	POWER SUPPLY SERVICES	FUEL RESOURCES	PIF	2	0	0	2	5	(3)
POWER SUPPLY	POWER SUPPLY SERVICES	FUELS INFRASTRUCTURE	PIJ	1	0	0	1		1
POWER SUPPLY	SYSTEM PLANNING	ADMINISTRATION	PXA	2	0	0	2		2
POWER SUPPLY	SYSTEM PLANNING	GENERATION BIDDING	PXB	1	0	0	1		1
POWER SUPPLY	SYSTEM PLANNING	GENERATION PLANNING	PYB	9	0	0	9	9	0
POWER SUPPLY	SYSTEM PLANNING	TRANSMISSION PLANNING	PYT	5	0	1	6	8	(2)
POWER SUPPLY	VP POWER SUPPLY	VP POWER SUPPLY	P7V	2	0	0	2	2	0
POWER SUPPLY		SUBTOTAL		422	0	6	428	455	(27)
SPECIAL PROJECTS	VP SPECIAL PROJECTS		P2W	0	0	0	0	2	(2)
SPECIAL PROJECTS		SUBTOTAL		0	0	0	0	2	(2)
PRESIDENT - HECO	CORPORATE AUDIT & COMPLIANCE	INTERNAL AUDIT	PNA	7	0	3	10	8	2
PRESIDENT - HECO	CORPORATE AUDIT & COMPLIANCE	ADMINISTRATION	PNX	3	0	0	3	4	(1)
PRESIDENT - HECO	PRESIDENTS OFFICE	PRESIDENTS OFFICE	P9P	3	0	0	3	5	(2)
PRESIDENT - HECO		SUBTOTAL		13	0	3	16	17	(1)
PUBLIC AFFAIRS	EXEC VP PUBLIC AFFAIRS	EXEC VP PUBLIC AFFAIRS	P9V	3	0	0	3	2	1
PUBLIC AFFAIRS	GOVERNMENTAL RELATIONS	GOVERNMENTAL RELATIONS	PNI	2	0	0	2	3	(1)
PUBLIC AFFAIRS	INTEGRATED RESOURCE PLNG	INTEGRATED RESOURCE PLANNING	PYP	5	0	0	5	6	(1)
PUBLIC AFFAIRS		SUBTOTAL		10	0	0	10	11	(1)
		COMPANY TOTAL		1460	1	25	1486	1542	(56)

*Forecast Budget count for RA PDS includes RA's PDJ, PDK, PDL & PDU.

**Employee counts in Customer Solutions exclude employees covered under the DSM surcharge.

†Actual employee count increased due to reinstatement of two employees in PIW.

Hawaiian Electric Company, Inc.
September 30, 2007 Actual Employee Count vs Budget Employee Count

VICE PRESIDENT'S OFFICE	DEPARTMENT NAME	DIVISION NAME	RA	ACTUAL EMPLOYEE COUNT					DIFF
				FULL TIME	PART TIME	TEMP	TOTAL	BUDGET	
CORPORATE EXCELLENCE	COMPENSATION AND BENEFITS	EMPL BENEFITS & HLTH SVCS	PFB	8	0	0	8	10	(2)
CORPORATE EXCELLENCE	COMPENSATION AND BENEFITS	COMPENSATION	PFC	2	0	0	2	2	0
CORPORATE EXCELLENCE	COMPENSATION AND BENEFITS	WORKERS COMPENSATION	PPW	4	0	0	4	3	1
CORPORATE EXCELLENCE	INDUSTRIAL RELATIONS	ADMINISTRATION	PPA	3	0	0	3	3	0
CORPORATE EXCELLENCE	INDUSTRIAL RELATIONS	LABOR REL & WAGE ADMIN	PPI	5	0	0	5	6	(1)
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	CORPORATE SAFETY	PFS	11	0	0	11	12	(1)
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	ADMINISTRATION	PHA	3	0	0	3	2	1
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	FACILITIES OPERATIONS	PHB	14	0	0	14	15	(1)
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	FACILITIES PLANNING	PHF	8	0	0	8	8	0
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	SECURITY	PHS	7	0	0	7	10	(3)
CORPORATE EXCELLENCE	VP CORPORATE EXCELLENCE	VP CORPORATE EXCELLENCE	P6V	2	0	0	2	2	0
CORPORATE EXCELLENCE	WORKFORCE STAFFING & DEVELOP	ADMINISTRATION	PFA	3	0	0	3	4	(1)
CORPORATE EXCELLENCE	WORKFORCE STAFFING & DEVELOP	CLIENT SERVICES & CONSULTING	PFD	10	0	0	10	10	0
CORPORATE EXCELLENCE	WORKFORCE STAFFING & DEVELOP	ORGANIZ DEV & CONTIN IMPRVMT	PFI	3	0	0	3	3	0
CORPORATE EXCELLENCE		SUBTOTAL		83	0	0	83	90	(7)
CORPORATE RELATIONS	CORPORATE COMMUNICATIONS	CORPORATE COMMUNICATIONS	PQC	9	0	0	9	10	(1)
CORPORATE RELATIONS	VP CORPORATE RELATIONS	VP CORPORATE RELATIONS	P1V	3	0	0	3	2	1
CORPORATE RELATIONS		SUBTOTAL		12	0	0	12	12	0
CUSTOMER SOLUTIONS	CUSTOMER TECH APPLICATIONS	CUSTOMER TECH APPLICATIONS	PSR	9	0	0	9	10	(1)
CUSTOMER SOLUTIONS	ENERGY SERVICES	ADMINISTRATION	PSA	3	0	0	3	3	0
CUSTOMER SOLUTIONS	ENERGY SERVICES	CUSTOMER EFFICIENCY PROGRAM	PSD**	5	0	0	5	5	0
CUSTOMER SOLUTIONS	ENERGY SERVICES	PRICING	PSP	4	0	0	4	5	(1)
CUSTOMER SOLUTIONS	FORECASTS & RESEARCH	FORECASTS & RESEARCH	PSM	10	0	0	10	9	1
CUSTOMER SOLUTIONS	MARKETING SERVICES	MARKETING SERVICES	PSN	12	0	0	12	12	0
CUSTOMER SOLUTIONS	VP CUSTOMER SOLUTIONS	CUSTOMER SOLUTIONS	P1W	2	0	0	2	2	0
CUSTOMER SOLUTIONS		SUBTOTAL		45	0	0	45	46	(1)
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	ADMINISTRATION	PDA	5	0	0	5	6	(1)
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	CONTROL SECTION	PDC	5	0	0	5	8	(3)
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	TRAINING SECTION	PDD	8	0	0	8		8
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	FIELD OPERATION	PDF	22	0	0	22	22	0
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	WEST OVERHEAD	PDJ*	43	0	0	43		
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	EAST OVERHEAD-KOOLAU	PDK*	26	0	0	26		
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	EAST OVERHEAD-WARD	PDL *	40	0	0	40		
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	PLANNING	PDP	23	0	1	24	13	11
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	OPERATIONS	PDS*	12	0	0	12	170	(22)
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	UNDERGROUND	PDU*	27	0	0	27		
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	VEGETATION MANAGEMENT	PDV	2	0	0	2	1	1
ENERGY DELIVERY	ENGINEERING	ADMINISTRATION	PBA	6	0	0	6	7	(1)
ENERGY DELIVERY	ENGINEERING	T&D ENGINEERING	PBE	16	0	0	16	23	(7)
ENERGY DELIVERY	ENGINEERING	PROJECT MANAGEMENT	PBP	9	0	0	9	7	2
ENERGY DELIVERY	ENGINEERING	DISTRIBUTION PLANNING	PBS	6	0	0	6		6
ENERGY DELIVERY	ENGINEERING	STRUCTURAL	PBT	18	0	0	18	18	0
ENERGY DELIVERY	ENGINEERING	SUBST.PROTECTION&TELECOM	PBY	20	0	0	20	22	(2)
ENERGY DELIVERY	ENGINEERING	T&D TECHNICAL SERVICES	PBZ	7	0	0	7	8	(1)
ENERGY DELIVERY	SUPPORT SERVICES	ADMINISTRATION	PVA	5	0	0	5	5	0
ENERGY DELIVERY	SUPPORT SERVICES	FLEET	PVF	24	0	0	24	25	(1)
ENERGY DELIVERY	SUPPORT SERVICES	ELECTRICAL & WELDING SERVICES	PVL	12	0	0	12	12	0
ENERGY DELIVERY	SUPPORT SERVICES	MATERIALS MANAGEMENT	PVM	28	0	0	28	28	0
ENERGY DELIVERY	SUPPORT SERVICES	PURCHASING	PVP	15	0	0	15	15	0
ENERGY DELIVERY	SYSTEM OPERATION	ADMINISTRATION	PRA	7	0	0	7	7	0
ENERGY DELIVERY	SYSTEM OPERATION	COMMUNICATIONS	PRC	8	0	0	8	8	0
ENERGY DELIVERY	SYSTEM OPERATION	OPERATING DISPATCH	PRD	24	0	0	24	27	(3)
ENERGY DELIVERY	SYSTEM OPERATION	OPERATING ENGINEERING	PRE	12	0	0	12	14	(2)
ENERGY DELIVERY	SYSTEM OPERATION	INSTRUMENT & CONTROL	PRI	9	0	0	9	9	0
ENERGY DELIVERY	SYSTEM OPERATION	RELAY	PRR	10	0	0	10	10	0
ENERGY DELIVERY	SYSTEM OPERATION	SUBSTATION	PRS	38	0	0	38	39	(1)
ENERGY DELIVERY	SYSTEM OPERATION	CONSTRUCTION MANAGEMENT	PRX	3	0	0	3	3	0
ENERGY DELIVERY	VP ENERGY DELIVERY	VP ENERGY DELIVERY	P2V	2	0	0	2	2	0
ENERGY DELIVERY		SUBTOTAL		492	0	1	493	509	(16)
ENERGY SOLUTIONS	CUSTOMER INSTALLATION	ADMINISTRATION	PWA	12	0	0	12	12	0
ENERGY SOLUTIONS	CUSTOMER INSTALLATION	PLANNING & DESIGN	PWP	23	0	0	23	28	(5)
ENERGY SOLUTIONS	CUSTOMER INSTALLATION	ENGINEERING & METER	PWX	15	0	0	15	14	1
ENERGY SOLUTIONS	ENERGY PROJECTS	ENERGY PROJECTS	PNG	9	0	0	9	9	0
ENERGY SOLUTIONS	SR VP ENERGY SOLUTIONS	SR VP ENERGY SOLUTIONS	P9S	4	0	0	4	4	0
ENERGY SOLUTIONS	TECHNOLOGY	TECHNOLOGY	PNR	2	0	1	3	3	0
ENERGY SOLUTIONS		SUBTOTAL		65	0	1	66	70	(4)
FINANCE & ADMIN	GENERAL ACCOUNTING	ADMINISTRATION	PAA	6	0	0	6	6	0
FINANCE & ADMIN	GENERAL ACCOUNTING	CORPORATE ACCOUNTING	PAC	5	0	0	5	5	0
FINANCE & ADMIN	GENERAL ACCOUNTING	COST ACCOUNTING	PAD	10	0	0	10	10	0
FINANCE & ADMIN	GENERAL ACCOUNTING	PROPERTY ACCOUNTING	PAT	5	0	0	5	5	0
FINANCE & ADMIN	INFO TECHNOLOGY & SVCS	ADMINISTRATION	PEA	2	0	0	2	2	0
FINANCE & ADMIN	INFO TECHNOLOGY & SVCS	CUSTOMER CARE	PEC	20	0	0	20	23	(3)
FINANCE & ADMIN	INFO TECHNOLOGY & SVCS	DEVELOPMENT SERVICES	PED	34	0	0	34	37	(3)
FINANCE & ADMIN	INFO TECHNOLOGY & SVCS	INFRASTRUCTURE & OPERATIONS	PEI	25	0	0	25	24	1
FINANCE & ADMIN	INFO TECHNOLOGY & SVCS	MAILING SERVICES	PEM	8	0	0	8	8	0

Hawaiian Electric Company, Inc.
September 30, 2007 Actual Employee Count vs Budget Employee Count

VICE PRESIDENT'S OFFICE	DEPARTMENT NAME	DIVISION NAME	RA	ACTUAL EMPLOYEE COUNT					DIFF
				FULL TIME	PART TIME	TEMP	TOTAL	BUDGET	
FINANCE & ADMIN	MANAGEMENT ACCTG & FIN SVCS	ADMINISTRATION	PKB	4	0	0	4	4	0
FINANCE & ADMIN	MANAGEMENT ACCTG & FIN SVCS	BUDGETS	PKC	7	0	0	7	7	0
FINANCE & ADMIN	MANAGEMENT ACCTG & FIN SVCS	FINANCIAL ANALYSIS	PKF	2	0	0	2	3	(1)
FINANCE & ADMIN	MANAGEMENT ACCTG & FIN SVCS	ERP ADMINISTRATION	PKM	3	0	0	3	3	0
FINANCE & ADMIN	MANAGEMENT ACCTG & FIN SVCS	TREASURY	PKT	4	0	0	4	5	(1)
FINANCE & ADMIN	RISK MANAGEMENT	RISK MANAGEMENT	PKI	9	0	0	9	9	0
FINANCE & ADMIN	SR VP FINANCE & ADMIN	SR VP FINANCE & ADMIN	P4V	4	0	0	4	3	1
FINANCE & ADMIN		SUBTOTAL		148	0	0	148	154	(6)
GENERAL COUNSEL	LEGAL	LEGAL	PNC	12	0	0	12	11	1
GENERAL COUNSEL	LEGAL	LAND & RIGHTS OF WAY	PNL	5	0	0	5	5	0
GENERAL COUNSEL	VP GENERAL COUNSEL	VP-GENERAL COUNSEL	P5V	2	0	0	2	2	0
GENERAL COUNSEL		SUBTOTAL		19	0	0	19	18	1
GOVT & COMMUNITY AFFAIRS	EDUCATION & CONSUMER AFFAIRS	EDUCATION & CONSUMER AFFAIRS	PQE	8	0	0	8	8	0
GOVT & COMMUNITY AFFAIRS	REGULATORY AFFAIRS	REGULATORY AFFAIRS	PNP	10	0	0	10	15	(5)
GOVT & COMMUNITY AFFAIRS	VP GOVT & COMMUNITY AFFAIRS	VP GOVT & COMMUNITY AFFAIRS	P3V	7	0	1	8	7	1
GOVT & COMMUNITY AFFAIRS		SUBTOTAL		25	0	1	26	30	(4)
OPERATIONS	CUSTOMER SERVICE	ADMINISTRATION	PCA	4	0	0	4	4	0
OPERATIONS	CUSTOMER SERVICE	CUST ACCOUNTING & BILLING	PCB	6	0	0	6	6	0
OPERATIONS	CUSTOMER SERVICE	CREDIT	PCD	4	0	0	4	5	(1)
OPERATIONS	CUSTOMER SERVICE	CUSTOMER FIELD SERVICES	PCF	3	0	1	4	4	0
OPERATIONS	CUSTOMER SERVICE	FIELD SERVICE & COLLECTIONS	PCG	27	0	0	27	26	1
OPERATIONS	CUSTOMER SERVICE	CUSTOMER ASSISTANCE CENTER	PCH	31	0	0	31	30	1
OPERATIONS	CUSTOMER SERVICE	METER READING	PCM	34	0	4	38	34	4
OPERATIONS	CUSTOMER SERVICE	PAYMT PROCESS & SUPPORT CTR	PCP	16	0	0	16	17	(1)
OPERATIONS	CUSTOMER SERVICE	CUSTOMER ACCOUNT SERVICES	PCS	5	0	0	5	5	0
OPERATIONS	SR VP OPERATIONS	SR VP OPERATIONS	P8V	2	0	0	2	3	(1)
OPERATIONS		SUBTOTAL		132	0	5	137	134	3
POWER SUPPLY	ENVIRONMENTAL	ADMINISTRATION	PJA	4	0	0	4	4	0
POWER SUPPLY	ENVIRONMENTAL	AIR QUALITY & NOISE	PJB	5	0	0	5	6	(1)
POWER SUPPLY	ENVIRONMENTAL	CHEMISTRY	PJC	6	0	0	6	6	0
POWER SUPPLY	ENVIRONMENTAL	WATER & HAZARDOUS MATERIAL	PJW	7	0	0	7	8	(1)
POWER SUPPLY	POWER SUPPLY ENGINEERING	ADMINISTRATION	PYA	3	0	0	3	3	0
POWER SUPPLY	POWER SUPPLY ENGINEERING	SUPPORT STAFF	PYC	2	0	0	2	2	0
POWER SUPPLY	POWER SUPPLY ENGINEERING	PS TECHNICAL SERVICES	PYE	8	0	0	8	9	(1)
POWER SUPPLY	POWER SUPPLY ENGINEERING	POWER PLANT ELECT ENGRG	PYF	12	0	1	13	12	1
POWER SUPPLY	POWER SUPPLY ENGINEERING	POWER PLANT DRAFTING	PYG	2	0	0	2	2	0
POWER SUPPLY	POWER SUPPLY ENGINEERING	POWER PLANT PROJECT MGT	PYJ	4	0	0	4	5	(1)
POWER SUPPLY	POWER SUPPLY ENGINEERING	POWER PLANT MECH ENGRG	PYM	13	0	1	14	13	1
POWER SUPPLY	POWER SUPPLY OPER & MAINT	O&M ADMINISTRATION	PIB	10	0	0	10	11	(1)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	TRAINING	PID	2	0	0	2		2
POWER SUPPLY	POWER SUPPLY OPER & MAINT	HONOLULU STATION OPERATIONS	PIH	26	0	0	26	27	(1)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	KAHE STATION OPERATIONS	PIK	62	0	0	62	61	1
POWER SUPPLY	POWER SUPPLY OPER & MAINT	KAHE STATION MAINTENANCE	PIL	28	0	0	28	33	(5)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	MAINTENANCE ADMINISTRATION	PIM	2	0	0	2	3	(1)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	HONOLULU STATION MAINTENANCE	PIN	11	0	0	11	12	(1)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	OPERATIONS ADMINISTRATION	PIO	2	0	0	2	4	(2)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	PLANNING AND ENGINEERING	PIP	22	0	1	23	21	2
POWER SUPPLY	POWER SUPPLY OPER & MAINT	TRAVELING MAINTENANCE	PIT	75	0	0	75	82	(7)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	WAI'AU STATION OPERATIONS	PIW†	66	0	0	66	66	0
POWER SUPPLY	POWER SUPPLY OPER & MAINT	WAI'AU STATION MAINTENANCE	PIX	30	0	0	30	32	(2)
POWER SUPPLY	POWER SUPPLY SERVICES	SERVICES ADMINISTRATION	PIA	2	0	0	2	3	(1)
POWER SUPPLY	POWER SUPPLY SERVICES	POWER PURCHASE	PIC	6	0	0	6	6	0
POWER SUPPLY	POWER SUPPLY SERVICES	FUEL RESOURCES	PIF	3	0	0	3	5	(2)
POWER SUPPLY	POWER SUPPLY SERVICES	FUELS INFRASTRUCTURE	PIJ	1	0	0	1		1
POWER SUPPLY	SYSTEM PLANNING	ADMINISTRATION	PXA	2	0	0	2		2
POWER SUPPLY	SYSTEM PLANNING	GENERATION BIDDING	PXB	3	0	0	3		3
POWER SUPPLY	SYSTEM PLANNING	GENERATION PLANNING	PYB	9	0	0	9	9	0
POWER SUPPLY	SYSTEM PLANNING	TRANSMISSION PLANNING	PYT	5	0	1	6	8	(2)
POWER SUPPLY	VP POWER SUPPLY	VP POWER SUPPLY	P7V	2	0	0	2	2	0
POWER SUPPLY		SUBTOTAL		435	0	4	439	455	(16)
SPECIAL PROJECTS	VP SPECIAL PROJECTS		P2W	0	0	0	0	2	(2)
SPECIAL PROJECTS		SUBTOTAL		0	0	0	0	2	(2)
PRESIDENT - HECO	CORPORATE AUDIT & COMPLIANCE	INTERNAL AUDIT	PNA	7	0	2	9	8	1
PRESIDENT - HECO	CORPORATE AUDIT & COMPLIANCE	ADMINISTRATION	PNX	1	0	0	1	4	(3)
PRESIDENT - HECO	PRESIDENTS OFFICE	PRESIDENTS OFFICE	P9P	3	0	0	3	5	(2)
PRESIDENT - HECO		SUBTOTAL		11	0	2	13	17	(4)
PUBLIC AFFAIRS	EXEC VP PUBLIC AFFAIRS	EXEC VP PUBLIC AFFAIRS	P9V	3	0	0	3	2	1
PUBLIC AFFAIRS	GOVERNMENTAL RELATIONS	GOVERNMENTAL RELATIONS	PNI	3	0	0	3	3	0
PUBLIC AFFAIRS	INTEGRATED RESOURCE PLNG	INTEGRATED RESOURCE PLANNING	PYP	5	0	0	5	6	(1)
PUBLIC AFFAIRS		SUBTOTAL		11	0	0	11	11	0
		COMPANY TOTAL		1478	0	14	1492	1548	(56)

*Forecast Budget count for RA PDS includes RA's PDJ, PDK, PDL & PDU.

**Employee counts in Customer Solutions exclude employees covered under the DSM surcharge.

†Actual employee count increased due to reinstatement of two employees in PIW.

Hawaiian Electric Company, Inc.
December 31, 2007 Actual Employee Count vs Budget Employee Count

VICE PRESIDENT'S OFFICE	DEPARTMENT NAME	DIVISION NAME	RA	ACTUAL EMPLOYEE COUNT					
				FULL TIME	PART TIME	TEMP	TOTAL	BUDGET	DIFF
CORPORATE EXCELLENCE	COMPENSATION AND BENEFITS	EMPL BENEFITS & HLTH SVCS	PFB ^a	8	0	0	8	8	0
CORPORATE EXCELLENCE	COMPENSATION AND BENEFITS	COMPENSATION	PFC	2	0	0	2	2	0
CORPORATE EXCELLENCE	INDUSTRIAL RELATIONS	ADMINISTRATION	PPA	3	0	0	3	3	0
CORPORATE EXCELLENCE	INDUSTRIAL RELATIONS	LABOR REL & WAGE ADMIN	PPI	6	0	0	6	6	0
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	CORPORATE SAFETY	PFS	12	0	0	12	12	0
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	ADMINISTRATION	PHA	2	0	0	2	2	0
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	FACILITIES OPERATIONS	PHB	14	0	0	14	15	(1)
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	FACILITIES PLANNING	PHF	8	0	0	8	8	0
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	SECURITY	PHS	7	0	0	7	10	(3)
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	CORP HEALTH & WELLNESS	PPH	2	0	0	2	2	0
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	WORKERS COMPENSATION	PPW	2	0	0	2	3	(1)
CORPORATE EXCELLENCE	VP CORPORATE EXCELLENCE	VP CORPORATE EXCELLENCE	P6V	4	0	0	4	2	2
CORPORATE EXCELLENCE	WORKFORCE STAFFING & DEVELOP	ADMINISTRATION	PFA	4	0	0	4	4	0
CORPORATE EXCELLENCE	WORKFORCE STAFFING & DEVELOP	CLIENT SERVICES & CONSULTING	PFD	10	0	0	10	10	0
CORPORATE EXCELLENCE	WORKFORCE STAFFING & DEVELOP	ORGANIZ DEV & CONTIN IMPRVMT	PFI	3	0	0	3	3	0
CORPORATE EXCELLENCE		SUBTOTAL		87	0	0	87	90	(3)
CORPORATE RELATIONS	CORPORATE COMMUNICATIONS	CORPORATE COMMUNICATIONS	PQC	9	0	0	9	10	(1)
CORPORATE RELATIONS	VP CORPORATE RELATIONS	VP CORPORATE RELATIONS	P1V	3	0	0	3	2	1
CORPORATE RELATIONS		SUBTOTAL		12	0	0	12	12	0
CUSTOMER SOLUTIONS	CUSTOMER TECH APPLICATIONS	CUSTOMER TECH APPLICATIONS	PSR	9	0	0	9	10	(1)
CUSTOMER SOLUTIONS	ENERGY SERVICES	ADMINISTRATION	PSA	3	0	0	3	3	0
CUSTOMER SOLUTIONS	ENERGY SERVICES	CUSTOMER EFFICIENCY PROGRAM	PSD**	4	0	0	4	5	(1)
CUSTOMER SOLUTIONS	ENERGY SERVICES	PRICING	PSP	5	0	0	5	5	0
CUSTOMER SOLUTIONS	FORECASTS & RESEARCH	FORECASTS & RESEARCH	PSM	10	0	0	10	10	0
CUSTOMER SOLUTIONS	MARKETING SERVICES	MARKETING SERVICES	PSN	11	0	0	11	12	(1)
CUSTOMER SOLUTIONS	VP CUSTOMER SOLUTIONS	CUSTOMER SOLUTIONS	P1W	2	0	0	2	2	0
CUSTOMER SOLUTIONS		SUBTOTAL		44	0	0	44	47	(3)
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	ADMINISTRATION	PDA	7	0	0	7	6	1
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	CONTROL SECTION	PDC	5	0	0	5	8	(3)
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	TRAINING SECTION	PDD	1	0	0	1		1
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	FIELD OPERATION	PDF	21	0	0	21	22	(1)
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	WEST OVERHEAD	PDJ*	46	0	0	46		
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	EAST OVERHEAD-KOOLAU	PDK*	27	0	0	27		
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	EAST OVERHEAD-WARD	PDL *	43	0	0	43		
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	PLANNING	PDP	22	0	1	23	13	10
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	OPERATIONS	PDS*	13	0	0	13	170	(14)
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	UNDERGROUND	PDU*	27	0	0	27		
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	VEGETATION MANAGEMENT	PDV	2	0	0	2	1	1
ENERGY DELIVERY	ENGINEERING	ADMINISTRATION	PBA	7	0	0	7	7	0
ENERGY DELIVERY	ENGINEERING	T&D ENGINEERING	PBE	15	0	0	15	23	(8)
ENERGY DELIVERY	ENGINEERING	PROJECT MANAGEMENT	PBP	10	0	0	10	7	3
ENERGY DELIVERY	ENGINEERING	DISTRIBUTION PLANNING	PBS	6	0	0	6		6
ENERGY DELIVERY	ENGINEERING	STRUCTURAL	PBT	17	0	0	17	18	(1)
ENERGY DELIVERY	ENGINEERING	SUBST, PROTECTION & TELECOM	PBY	21	0	0	21	22	(1)
ENERGY DELIVERY	ENGINEERING	T&D TECHNICAL SERVICES	PBZ	7	0	0	7	8	(1)
ENERGY DELIVERY	SUPPORT SERVICES	ADMINISTRATION	PVA	5	0	0	5	5	0
ENERGY DELIVERY	SUPPORT SERVICES	FLEET	PVF	24	0	0	24	25	(1)
ENERGY DELIVERY	SUPPORT SERVICES	ELECTRICAL & WELDING SERVICES	PVL	12	0	0	12	12	0
ENERGY DELIVERY	SUPPORT SERVICES	MATERIALS MANAGEMENT	PVM	27	0	0	27	28	(1)
ENERGY DELIVERY	SUPPORT SERVICES	PURCHASING	PVP	16	0	0	16	15	1
ENERGY DELIVERY	SYSTEM OPERATION	ADMINISTRATION	PRA	7	0	0	7	7	0
ENERGY DELIVERY	SYSTEM OPERATION	COMMUNICATIONS	PRC	8	0	0	8	8	0
ENERGY DELIVERY	SYSTEM OPERATION	OPERATING DISPATCH	PRD	26	0	0	26	27	(1)
ENERGY DELIVERY	SYSTEM OPERATION	OPERATING ENGINEERING	PRE	14	0	0	14	14	0
ENERGY DELIVERY	SYSTEM OPERATION	INSTRUMENT & CONTROL	PRI	9	0	0	9	9	0
ENERGY DELIVERY	SYSTEM OPERATION	RELAY	PRR	10	0	0	10	10	0
ENERGY DELIVERY	SYSTEM OPERATION	SUBSTATION	PRS	37	0	0	37	39	(2)
ENERGY DELIVERY	SYSTEM OPERATION	CONSTRUCTION MANAGEMENT	PRX	3	0	0	3	3	0
ENERGY DELIVERY	VP ENERGY DELIVERY	VP ENERGY DELIVERY	P2V	2	0	0	2	2	0
ENERGY DELIVERY		SUBTOTAL		497	0	1	498	509	(11)
ENERGY SOLUTIONS	CUSTOMER INSTALLATION	ADMINISTRATION	PWA	12	0	0	12	12	0
ENERGY SOLUTIONS	CUSTOMER INSTALLATION	PLANNING & DESIGN	PWP	23	0	0	23	27	(4)
ENERGY SOLUTIONS	CUSTOMER INSTALLATION	ENGINEERING & METER	PWX	15	0	0	15	14	1
ENERGY SOLUTIONS	ENERGY PROJECTS	ENERGY PROJECTS	PNG	9	0	0	9	9	0
ENERGY SOLUTIONS	SR VP ENERGY SOLUTIONS	SR VP ENERGY SOLUTIONS	P9S	4	0	0	4	4	0
ENERGY SOLUTIONS	TECHNOLOGY	TECHNOLOGY	PNR	2	0	1	3	3	0
ENERGY SOLUTIONS		SUBTOTAL		65	0	1	66	69	(3)
FINANCE & ADMIN	GENERAL ACCOUNTING	ADMINISTRATION	PAA	6	0	0	6	6	0
FINANCE & ADMIN	GENERAL ACCOUNTING	CORPORATE ACCOUNTING	PAC	5	0	0	5	5	0
FINANCE & ADMIN	GENERAL ACCOUNTING	COST ACCOUNTING	PAD	10	0	0	10	10	0
FINANCE & ADMIN	GENERAL ACCOUNTING	PROPERTY ACCOUNTING	PAT	5	0	0	5	5	0
FINANCE & ADMIN	INFO TECHNOLOGY & SVCS	ADMINISTRATION	PEA	2	0	0	2	2	0
FINANCE & ADMIN	INFO TECHNOLOGY & SVCS	CUSTOMER CARE	PEC	21	0	0	21	23	(2)
FINANCE & ADMIN	INFO TECHNOLOGY & SVCS	DEVELOPMENT SERVICES	PED	35	0	0	35	37	(2)
FINANCE & ADMIN	INFO TECHNOLOGY & SVCS	INFRASTRUCTURE & OPERATIONS	PEI	21	0	0	21	24	(3)

Hawaiian Electric Company, Inc.
December 31, 2007 Actual Employee Count vs Budget Employee Count

VICE PRESIDENT'S OFFICE	DEPARTMENT NAME	DIVISION NAME	RA	ACTUAL EMPLOYEE COUNT					
				FULL TIME	PART TIME	TEMP	TOTAL	BUDGET	DIFF
FINANCE & ADMIN	INFO TECHNOLOGY & SVCS	INFORMATION ASSURANCE	PEJ	2	0	0	2		2
FINANCE & ADMIN	INFO TECHNOLOGY & SVCS	MAILING SERVICES	PEM	8	0	0	8	8	0
FINANCE & ADMIN	MANAGEMENT ACCTG & FIN SVCS	ADMINISTRATION	PKB	4	0	0	4	4	0
FINANCE & ADMIN	MANAGEMENT ACCTG & FIN SVCS	BUDGETS	PKC	7	0	0	7	7	0
FINANCE & ADMIN	MANAGEMENT ACCTG & FIN SVCS	FINANCIAL ANALYSIS	PKF	2	0	0	2	3	(1)
FINANCE & ADMIN	MANAGEMENT ACCTG & FIN SVCS	ERP ADMINISTRATION	PKM	3	0	0	3	3	0
FINANCE & ADMIN	MANAGEMENT ACCTG & FIN SVCS	TREASURY	PKT	4	0	0	4	5	(1)
FINANCE & ADMIN	RISK MANAGEMENT	RISK MANAGEMENT	PKI	9	0	0	9	9	0
FINANCE & ADMIN	SR VP FINANCE & ADMIN	SR VP FINANCE & ADMIN	P4V	3	0	0	3	3	0
FINANCE & ADMIN		SUBTOTAL		147	0	0	147	154	(7)
GENERAL COUNSEL	LEGAL	LEGAL	PNC	10	0	0	10	11	(1)
GENERAL COUNSEL	LEGAL	LAND & RIGHTS OF WAY	PNL	5	0	0	5	5	0
GENERAL COUNSEL	VP GENERAL COUNSEL	VP-GENERAL COUNSEL	P5V	2	0	0	2	2	0
GENERAL COUNSEL		SUBTOTAL		17	0	0	17	18	(1)
GOVT & COMMUNITY AFFAIRS	EDUCATION & CONSUMER AFFAIRS	EDUCATION & CONSUMER AFFAIRS	PQE	8	0	0	8	8	0
GOVT & COMMUNITY AFFAIRS	REGULATORY AFFAIRS	REGULATORY AFFAIRS	PNP	9	0	0	9	15	(6)
GOVT & COMMUNITY AFFAIRS	VP GOVT & COMMUNITY AFFAIRS	VP GOVT & COMMUNITY AFFAIRS	P3V	7	0	0	7	7	0
GOVT & COMMUNITY AFFAIRS		SUBTOTAL		24	0	0	24	30	(6)
OPERATIONS	CUSTOMER SERVICE	ADMINISTRATION	PCA	4	0	0	4	4	0
OPERATIONS	CUSTOMER SERVICE	CUST ACCOUNTING & BILLING	PCB	6	0	0	6	6	0
OPERATIONS	CUSTOMER SERVICE	CREDIT	PCD	3	0	0	3	5	(2)
OPERATIONS	CUSTOMER SERVICE	CUSTOMER FIELD SERVICES	PCF	3	0	0	3	4	(1)
OPERATIONS	CUSTOMER SERVICE	FIELD SERVICE & COLLECTIONS	PCG	27	0	0	27	26	1
OPERATIONS	CUSTOMER SERVICE	CUSTOMER ASSISTANCE CENTER	PCH	32	0	0	32	30	2
OPERATIONS	CUSTOMER SERVICE	METER READING	PCM	34	0	7	41	34	7
OPERATIONS	CUSTOMER SERVICE	PAYMT PROCESS & SUPPORT CTR	PCP	15	0	0	15	17	(2)
OPERATIONS	CUSTOMER SERVICE	CUSTOMER ACCOUNT SERVICES	PCS	5	0	0	5	5	0
OPERATIONS	SR VP OPERATIONS	SR VP OPERATIONS	P8V	2	0	0	2	3	(1)
OPERATIONS		SUBTOTAL		131	0	7	138	134	4
POWER SUPPLY	ENVIRONMENTAL	ADMINISTRATION	PJA	4	0	0	4	4	0
POWER SUPPLY	ENVIRONMENTAL	AIR QUALITY & NOISE	PJB	5	0	0	5	6	(1)
POWER SUPPLY	ENVIRONMENTAL	CHEMISTRY	PJC	6	0	1	7	6	1
POWER SUPPLY	ENVIRONMENTAL	WATER & HAZARDOUS MATERIAL	PJW	8	0	0	8	8	0
POWER SUPPLY	POWER SUPPLY ENGINEERING	ADMINISTRATION	PYA	3	0	0	3	3	0
POWER SUPPLY	POWER SUPPLY ENGINEERING	SUPPORT STAFF	PYC	2	0	0	2	2	0
POWER SUPPLY	POWER SUPPLY ENGINEERING	PS TECHNICAL SERVICES	PYE	9	0	0	9	9	0
POWER SUPPLY	POWER SUPPLY ENGINEERING	POWER PLANT ELECT ENGRG	PYF	11	0	1	12	12	0
POWER SUPPLY	POWER SUPPLY ENGINEERING	POWER PLANT DRAFTING	PYG	2	0	0	2	2	0
POWER SUPPLY	POWER SUPPLY ENGINEERING	POWER PLANT PROJECT MGT	PYJ	4	0	0	4	5	(1)
POWER SUPPLY	POWER SUPPLY ENGINEERING	POWER PLANT MECH ENGRG	PYM	13	0	1	14	13	1
POWER SUPPLY	POWER SUPPLY OPER & MAINT	O&M ADMINISTRATION	PIB	11	0	0	11	11	0
POWER SUPPLY	POWER SUPPLY OPER & MAINT	TRAINING	PID	2	0	0	2		2
POWER SUPPLY	POWER SUPPLY OPER & MAINT	HONOLULU STATION OPERATIONS	PIH	25	0	0	25	27	(2)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	KAHE STATION OPERATIONS	PIK	60	0	0	60	61	(1)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	KAHE STATION MAINTENANCE	PIL	28	0	0	28	33	(5)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	MAINTENANCE ADMINISTRATION	PIM	2	0	0	2	3	(1)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	HONOLULU STATION MAINTENANCE	PIN	11	0	0	11	12	(1)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	OPERATIONS ADMINISTRATION	PIO	2	0	0	2	4	(2)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	PLANNING AND ENGINEERING	PIP	22	0	1	23	21	2
POWER SUPPLY	POWER SUPPLY OPER & MAINT	TRAVELING MAINTENANCE	PIT	77	0	0	77	82	(5)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	WAI'AU STATION OPERATIONS	PIW [†]	62	0	0	62	66	(4)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	WAI'AU STATION MAINTENANCE	PIX	30	0	0	30	32	(2)
POWER SUPPLY	POWER SUPPLY SERVICES	SERVICES ADMINISTRATION	PIA	2	0	0	2	3	(1)
POWER SUPPLY	POWER SUPPLY SERVICES	POWER PURCHASE	PIC	6	0	0	6	6	0
POWER SUPPLY	POWER SUPPLY SERVICES	FUEL RESOURCES	PIF	3	0	0	3	5	(2)
POWER SUPPLY	POWER SUPPLY SERVICES	FUELS INFRASTRUCTURE	PIJ	2	0	0	2		2
POWER SUPPLY	SYSTEM PLANNING	ADMINISTRATION	PXA	2	0	0	2		2
POWER SUPPLY	SYSTEM PLANNING	GENERATION BIDDING	PXB	3	0	0	3		3
POWER SUPPLY	SYSTEM PLANNING	GENERATION PLANNING	PYB	9	0	0	9	9	0
POWER SUPPLY	SYSTEM PLANNING	TRANSMISSION PLANNING	PYT	5	0	0	5	8	(3)
POWER SUPPLY	VP POWER SUPPLY	VP POWER SUPPLY	P7V	2	0	0	2	2	0
POWER SUPPLY		SUBTOTAL		433	0	4	437	455	(18)
SPECIAL PROJECTS	VP SPECIAL PROJECTS		P2W	0	0	0	0	2	(2)
SPECIAL PROJECTS		SUBTOTAL		0	0	0	0	2	(2)
PRESIDENT - HECO	CORPORATE AUDIT & COMPLIANCE	INTERNAL AUDIT	PNA	7	0	1	8	8	0
PRESIDENT - HECO	CORPORATE AUDIT & COMPLIANCE	ADMINISTRATION	PNX	1	0	0	1	4	(3)
PRESIDENT - HECO	PRESIDENTS OFFICE	PRESIDENTS OFFICE	P9P	3	0	0	3	5	(2)
PRESIDENT - HECO		SUBTOTAL		11	0	1	12	17	(5)
PUBLIC AFFAIRS	EXEC VP PUBLIC AFFAIRS	EXEC VP PUBLIC AFFAIRS	P9V	3	0	0	3	2	1
PUBLIC AFFAIRS	GOVERNMENTAL RELATIONS	GOVERNMENTAL RELATIONS	PNI	3	0	0	3	3	0
PUBLIC AFFAIRS	INTEGRATED RESOURCE PLNG	INTEGRATED RESOURCE PLANNING	PYP	5	0	0	5	6	(1)
PUBLIC AFFAIRS		SUBTOTAL		11	0	0	11	11	0
		COMPANY TOTAL		1479	0	14	1493	1548	(55)

*Forecast Budget count for RA PDS includes RA's PDJ, PDK, PDL & PDU.

**Employee counts in Customer Solutions exclude employees covered under the DSM surcharge.

†Actual employee count increased due to reinstatement of one employee in PIW.

Hawaiian Electric Company, Inc.
March 31, 2008 Actual Employee Count vs Budget Employee Count

VICE PRESIDENT'S OFFICE	DEPARTMENT NAME	DIVISION NAME	RA	ACTUAL EMPLOYEE COUNT					
				FULL TIME	PART TIME	TEMP	TOTAL	BUDGET	DIFF
CORPORATE EXCELLENCE	COMPENSATION AND BENEFITS	EMPL BENEFITS & HLTH SVCS	PFB	8	0	0	8	9	(1)
CORPORATE EXCELLENCE	COMPENSATION AND BENEFITS	COMPENSATION	PFC	2	0	0	2	2	0
CORPORATE EXCELLENCE	INDUSTRIAL RELATIONS	ADMINISTRATION	PPA	3	0	0	3	3	0
CORPORATE EXCELLENCE	INDUSTRIAL RELATIONS	LABOR REL & WAGE ADMIN	PPI	6	0	0	6	6	0
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	CORPORATE SAFETY	PFS	12	0	0	12	12	0
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	ADMINISTRATION	PHA	2	0	0	2	2	0
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	FACILITIES OPERATIONS	PHB	14	0	0	14	15	(1)
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	FACILITIES PLANNING	PHF	8	0	0	8	8	0
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	SECURITY	PHS	6	0	0	6	9	(3)
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	CORP HEALTH & WELLNESS	PPH	2	0	0	2	2	0
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	WORKERS COMPENSATION	PPW	2	0	0	2	2	0
CORPORATE EXCELLENCE	VP CORPORATE EXCELLENCE	VP CORPORATE EXCELLENCE	P6V	4	0	0	4	5	(1)
CORPORATE EXCELLENCE	WORKFORCE STAFFING & DEVELOP	ADMINISTRATION	PFA	4	0	0	4	4	0
CORPORATE EXCELLENCE	WORKFORCE STAFFING & DEVELOP	CLIENT SERVICES & CONSULTING	PFD	9	0	0	9	10	(1)
CORPORATE EXCELLENCE	WORKFORCE STAFFING & DEVELOP	ORGANIZ DEV & CONTIN IMPRVMT	PFI	3	0	0	3	4	(1)
CORPORATE EXCELLENCE		SUBTOTAL		85	0	0	85	93	(8)
CORPORATE RELATIONS	CORPORATE COMMUNICATIONS	CORPORATE COMMUNICATIONS	PQC	9	0	0	9	10	(1)
CORPORATE RELATIONS	VP CORPORATE RELATIONS	VP CORPORATE RELATIONS	P1V	3	0	0	3	3	0
CORPORATE RELATIONS		SUBTOTAL		12	0	0	12	13	(1)
CUSTOMER SOLUTIONS	CUSTOMER TECH APPLICATIONS	CUSTOMER TECH APPLICATIONS	PSR	9	0	0	9	9	0
CUSTOMER SOLUTIONS	ENERGY SERVICES	ADMINISTRATION	PSA	3	0	0	3	3	0
CUSTOMER SOLUTIONS	ENERGY SERVICES	CUSTOMER EFFICIENCY PROGRAM	PSD**	5	0	0	5	5	0
CUSTOMER SOLUTIONS	ENERGY SERVICES	PRICING	PSP	5	0	0	5	5	0
CUSTOMER SOLUTIONS	FORECASTS & RESEARCH	FORECASTS & RESEARCH	PSM	10	0	0	10	10	0
CUSTOMER SOLUTIONS	MARKETING SERVICES	MARKETING SERVICES	PSN	11	0	0	11	12	(1)
CUSTOMER SOLUTIONS	VP CUSTOMER SOLUTIONS	CUSTOMER SOLUTIONS	P1W	2	0	0	2	2	0
CUSTOMER SOLUTIONS		SUBTOTAL		45	0	0	45	46	(1)
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	ADMINISTRATION	PDA	6	0	0	6	6	0
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	CONTROL SECTION	PDC	5	0	0	5	6	(1)
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	TRAINING SECTION	PDD	1	0	0	1		1
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	FIELD OPERATION	PDF	22	0	0	22	24	(2)
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	WEST OVERHEAD	PDJ*	46	0	0	46		
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	EAST OVERHEAD-KOOLAU	PDK*	26	0	0	26		
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	EAST OVERHEAD-WARD	PDL *	42	0	0	42		
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	PLANNING	PDP	22	0	1	23	16	7
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	OPERATIONS	PDS*	13	0	0	13	165	(11)
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	UNDERGROUND	PDU*	27	0	0	27		
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	VEGETATION MANAGEMENT	PDV	2	0	0	2	3	(1)
ENERGY DELIVERY	ENGINEERING	ADMINISTRATION	PBA	7	0	0	7	7	0
ENERGY DELIVERY	ENGINEERING	T&D ENGINEERING	PBE	16	0	1	17	18	(1)
ENERGY DELIVERY	ENGINEERING	PROJECT MANAGEMENT	PBP	10	0	0	10	8	2
ENERGY DELIVERY	ENGINEERING	DISTRIBUTION PLANNING	PBS	6	0	0	6	6	0
ENERGY DELIVERY	ENGINEERING	STRUCTURAL	PBT	17	0	0	17	18	(1)
ENERGY DELIVERY	ENGINEERING	SUBST,PROTECTION&TELECOM	PBY	20	0	0	20	22	(2)
ENERGY DELIVERY	ENGINEERING	T&D TECHNICAL SERVICES	PBZ	7	0	0	7	9	(2)
ENERGY DELIVERY	SUPPORT SERVICES	ADMINISTRATION	PVA	5	0	0	5	5	0
ENERGY DELIVERY	SUPPORT SERVICES	FLEET	PVF	24	0	0	24	25	(1)
ENERGY DELIVERY	SUPPORT SERVICES	ELECTRICAL & WELDING SERVICES	PVL	12	0	0	12	12	0
ENERGY DELIVERY	SUPPORT SERVICES	MATERIALS MANAGEMENT	PVM	28	0	0	28	28	0
ENERGY DELIVERY	SUPPORT SERVICES	PURCHASING	PVP	15	0	0	15	15	0
ENERGY DELIVERY	SYSTEM OPERATION	ADMINISTRATION	PRA	7	0	0	7	7	0
ENERGY DELIVERY	SYSTEM OPERATION	COMMUNICATIONS	PRC	8	0	0	8	8	0
ENERGY DELIVERY	SYSTEM OPERATION	OPERATING DISPATCH	PRD	26	0	0	26	27	(1)
ENERGY DELIVERY	SYSTEM OPERATION	OPERATING ENGINEERING	PRE	13	0	0	13	14	(1)
ENERGY DELIVERY	SYSTEM OPERATION	INSTRUMENT & CONTROL	PRI	9	0	0	9	9	0
ENERGY DELIVERY	SYSTEM OPERATION	RELAY	PRR	10	0	0	10	10	0
ENERGY DELIVERY	SYSTEM OPERATION	SUBSTATION	PRS	39	0	0	39	39	0
ENERGY DELIVERY	SYSTEM OPERATION	CONSTRUCTION MANAGEMENT	PRX	3	0	0	3	3	0
ENERGY DELIVERY	VP ENERGY DELIVERY	VP ENERGY DELIVERY	P2V	2	0	0	2	2	0
ENERGY DELIVERY		SUBTOTAL		496	0	2	498	512	(14)
ENERGY SOLUTIONS	CUSTOMER INSTALLATION	ADMINISTRATION	PWA	12	0	0	12	12	0
ENERGY SOLUTIONS	CUSTOMER INSTALLATION	PLANNING & DESIGN	PWP	23	0	0	23	24	(1)
ENERGY SOLUTIONS	CUSTOMER INSTALLATION	ENGINEERING & METER	PWX	15	0	0	15	15	0
ENERGY SOLUTIONS	ENERGY PROJECTS	ENERGY PROJECTS	PNG	9	0	0	9	9	0
ENERGY SOLUTIONS	SR VP ENERGY SOLUTIONS	SR VP ENERGY SOLUTIONS	P9S	4	0	0	4	4	0
ENERGY SOLUTIONS	TECHNOLOGY	TECHNOLOGY	PNR	2	0	1	3	3	0
ENERGY SOLUTIONS		SUBTOTAL		65	0	1	66	67	(1)
FINANCE & ADMIN	GENERAL ACCOUNTING	ADMINISTRATION	PAA	6	0	0	6	6	0
FINANCE & ADMIN	GENERAL ACCOUNTING	CORPORATE ACCOUNTING	PAC	5	0	0	5	5	0
FINANCE & ADMIN	GENERAL ACCOUNTING	COST ACCOUNTING	PAD	10	0	0	10	10	0
FINANCE & ADMIN	GENERAL ACCOUNTING	PROPERTY ACCOUNTING	PAT	5	0	0	5	5	0
FINANCE & ADMIN	INFO TECHNOLOGY & SVCS	ADMINISTRATION	PEA	2	0	0	2	2	0
FINANCE & ADMIN	INFO TECHNOLOGY & SVCS	CUSTOMER CARE	PEC	22	0	0	22	22	0
FINANCE & ADMIN	INFO TECHNOLOGY & SVCS	DEVELOPMENT SERVICES	PED	31	0	0	31	35	(4)
FINANCE & ADMIN	INFO TECHNOLOGY & SVCS	INFRASTRUCTURE & OPERATIONS	PEI	22	0	0	22	25	(3)

Hawaiian Electric Company, Inc.
March 31, 2008 Actual Employee Count vs Budget Employee Count

VICE PRESIDENT'S OFFICE	DEPARTMENT NAME	DIVISION NAME	RA	ACTUAL EMPLOYEE COUNT					
				FULL TIME	PART TIME	TEMP	TOTAL	BUDGET	DIFF
FINANCE & ADMIN	INFO TECHNOLOGY & SVCS	INFORMATION ASSURANCE	PEJ	3	0	0	3	2	1
FINANCE & ADMIN	INFO TECHNOLOGY & SVCS	MAILING SERVICES	PEM	8	0	0	8	8	0
FINANCE & ADMIN	MANAGEMENT ACCTG & FIN SVCS	ADMINISTRATION	PKB	4	0	0	4	4	0
FINANCE & ADMIN	MANAGEMENT ACCTG & FIN SVCS	BUDGETS	PKC	6	0	0	6	7	(1)
FINANCE & ADMIN	MANAGEMENT ACCTG & FIN SVCS	FINANCIAL ANALYSIS	PKF	2	0	0	2	2	0
FINANCE & ADMIN	MANAGEMENT ACCTG & FIN SVCS	ERP ADMINISTRATION	PKM	3	0	0	3	3	0
FINANCE & ADMIN	MANAGEMENT ACCTG & FIN SVCS	TREASURY	PKT	5	0	0	5	5	0
FINANCE & ADMIN	RISK MANAGEMENT	RISK MANAGEMENT	PKI	9	0	0	9	9	0
FINANCE & ADMIN	SR VP FINANCE & ADMIN	SR VP FINANCE & ADMIN	P4V	3	0	0	3	3	0
FINANCE & ADMIN		SUBTOTAL		146	0	0	146	153	(7)
GENERAL COUNSEL	LEGAL	LEGAL	PNC	11	0	0	11	13	(2)
GENERAL COUNSEL	LEGAL	LAND & RIGHTS OF WAY	PNL	5	0	0	5	5	0
GENERAL COUNSEL	VP GENERAL COUNSEL	VP-GENERAL COUNSEL	P5V	2	0	0	2	2	0
GENERAL COUNSEL		SUBTOTAL		18	0	0	18	20	(2)
GOVT & COMMUNITY AFFAIRS	EDUCATION & CONSUMER AFFAIRS	EDUCATION & CONSUMER AFFAIRS	PQE	8	0	0	8	8	0
GOVT & COMMUNITY AFFAIRS	REGULATORY AFFAIRS	REGULATORY AFFAIRS	PNP	10	0	0	10	11	(1)
GOVT & COMMUNITY AFFAIRS	VP GOVT & COMMUNITY AFFAIRS	VP GOVT & COMMUNITY AFFAIRS	P3V	7	0	0	7	7	0
GOVT & COMMUNITY AFFAIRS		SUBTOTAL		25	0	0	25	26	(1)
OPERATIONS	CUSTOMER SERVICE	ADMINISTRATION	PCA	4	0	0	4	5	(1)
OPERATIONS	CUSTOMER SERVICE	CUST ACCOUNTING & BILLING	PCB	6	0	0	6	6	0
OPERATIONS	CUSTOMER SERVICE	CREDIT	PCD	3	0	0	3	5	(2)
OPERATIONS	CUSTOMER SERVICE	CUSTOMER FIELD SERVICES	PCF	3	0	1	4	5	(1)
OPERATIONS	CUSTOMER SERVICE	FIELD SERVICE & COLLECTIONS	PCG	27	0	0	27	26	1
OPERATIONS	CUSTOMER SERVICE	CUSTOMER ASSISTANCE CENTER	PCH	32	0	0	32	30	2
OPERATIONS	CUSTOMER SERVICE	METER READING	PCM	34	0	10	44	41	3
OPERATIONS	CUSTOMER SERVICE	PAYMT PROCESS & SUPPORT CTR	PCP	16	0	0	16	24	(8)
OPERATIONS	CUSTOMER SERVICE	CUSTOMER ACCOUNT SERVICES	PCS	6	0	0	6	5	1
OPERATIONS	SR VP OPERATIONS	SR VP OPERATIONS	P8V	2	0	0	2	2	0
OPERATIONS		SUBTOTAL		133	0	11	144	149	(5)
POWER SUPPLY	ENVIRONMENTAL	ADMINISTRATION	PJA	4	0	0	4	4	0
POWER SUPPLY	ENVIRONMENTAL	AIR QUALITY & NOISE	PJB	6	0	0	6	6	0
POWER SUPPLY	ENVIRONMENTAL	CHEMISTRY	PJC	6	0	0	6	6	0
POWER SUPPLY	ENVIRONMENTAL	WATER & HAZARDOUS MATERIAL	PJW	8	0	0	8	8	0
POWER SUPPLY	POWER SUPPLY ENGINEERING	ADMINISTRATION	PYA	3	0	0	3	3	0
POWER SUPPLY	POWER SUPPLY ENGINEERING	SUPPORT STAFF	PYC	3	0	0	3	3	0
POWER SUPPLY	POWER SUPPLY ENGINEERING	PS TECHNICAL SERVICES	PYE	10	0	0	10	10	0
POWER SUPPLY	POWER SUPPLY ENGINEERING	POWER PLANT ELECT ENGRG	PYF	11	0	1	12	11	1
POWER SUPPLY	POWER SUPPLY ENGINEERING	POWER PLANT DRAFTING	PYG	2	0	0	2	2	0
POWER SUPPLY	POWER SUPPLY ENGINEERING	POWER PLANT PROJECT MGT	PYJ	4	0	0	4	4	0
POWER SUPPLY	POWER SUPPLY ENGINEERING	POWER PLANT MECH ENGRG	PYM	12	0	1	13	14	(1)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	O&M ADMINISTRATION	PIB	8	0	0	8	10	(2)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	TRAINING	PID	2	0	0	2	3	(1)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	HONOLULU STATION OPERATIONS	PIH	27	0	0	27	27	0
POWER SUPPLY	POWER SUPPLY OPER & MAINT	KAHE STATION OPERATIONS	PIK	60	0	0	60	61	(1)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	KAHE STATION MAINTENANCE	PIL	28	0	0	28	33	(5)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	MAINTENANCE ADMINISTRATION	PIM	2	0	0	2	2	0
POWER SUPPLY	POWER SUPPLY OPER & MAINT	HONOLULU STATION MAINTENANCE	PIN	11	0	0	11	12	(1)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	OPERATIONS ADMINISTRATION	PIO	2	0	0	2	2	0
POWER SUPPLY	POWER SUPPLY OPER & MAINT	PLANNING AND ENGINEERING	PIP	22	0	1	23	24	(1)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	TRAVELING MAINTENANCE	PIT	76	0	0	76	82	(6)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	WAI'AU STATION OPERATIONS	PIW [†]	63	0	0	63	66	(3)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	WAI'AU STATION MAINTENANCE	PIX	31	0	0	31	32	(1)
POWER SUPPLY	POWER SUPPLY SERVICES	SERVICES ADMINISTRATION	PIA	2	0	0	2	2	0
POWER SUPPLY	POWER SUPPLY SERVICES	POWER PURCHASE	PIE	5	0	0	5	6	(1)
POWER SUPPLY	POWER SUPPLY SERVICES	FUEL RESOURCES	PIF	3	0	0	3	4	(1)
POWER SUPPLY	POWER SUPPLY SERVICES	FUELS INFRASTRUCTURE	PIJ	2	0	0	2	3	(1)
POWER SUPPLY	SYSTEM PLANNING	ADMINISTRATION	PXA	2	0	0	2	2	0
POWER SUPPLY	SYSTEM PLANNING	GENERATION BIDDING	PXB	3	0	0	3	3	0
POWER SUPPLY	SYSTEM PLANNING	GENERATION PLANNING	PYB	9	0	0	9	9	0
POWER SUPPLY	SYSTEM PLANNING	TRANSMISSION PLANNING	PYT	5	0	0	5	8	(3)
POWER SUPPLY	VP POWER SUPPLY	VP POWER SUPPLY	P7V	3	0	0	3	2	1
POWER SUPPLY		SUBTOTAL		435	0	3	438	464	(26)
PRESIDENT - HECO	CORPORATE AUDIT & COMPLIANCE	INTERNAL AUDIT	PNA	7	0	1	8	8	0
PRESIDENT - HECO	CORPORATE AUDIT & COMPLIANCE	ADMINISTRATION	PNX	0	0	0	0	1	(1)
PRESIDENT - HECO	PRESIDENTS OFFICE	PRESIDENTS OFFICE	P9P	4	0	0	4	3	1
PRESIDENT - HECO		SUBTOTAL		11	0	1	12	12	0
PUBLIC AFFAIRS	EXEC VP PUBLIC AFFAIRS	EXEC VP PUBLIC AFFAIRS	P9V	2	0	0	2	3	(1)
PUBLIC AFFAIRS	GOVERNMENTAL RELATIONS	GOVERNMENTAL RELATIONS	PNI	3	0	0	3	3	0
PUBLIC AFFAIRS	INTEGRATED RESOURCE PLNG	INTEGRATED RESOURCE PLANNING	PYP	5	0	0	5	6	(1)
PUBLIC AFFAIRS		SUBTOTAL		10	0	0	10	12	(2)
SR EXECUTIVE VICE	SR EXECUTIVE VICE PRESIDENT	SR EXECUTIVE VICE PRESIDENT	P9W	2	0	0	2	0	2
SR EXEC VICE PRESIDENT		SUBTOTAL		2	0	0	2	0	2
		COMPANY TOTAL		1483	0	18	1501	1567	(66)

*Forecast Budget count for RA PDS includes RA's PDJ, PDK, PDL & PDU.

**Employee counts in Customer Solutions exclude employees covered under the DSM surcharge.

†Actual employee count increased due to reinstatement of one employee in PIW.

Hawaiian Electric Company, Inc.
June 30, 2008 Actual Employee Count vs Budget Employee Count

VICE PRESIDENT'S OFFICE	DEPARTMENT NAME	DIVISION NAME	RA	ACTUAL EMPLOYEE COUNT					DIFF
				FULL TIME	PART TIME	TEMP	TOTAL	BUDGET	
CORPORATE EXCELLENCE	COMPENSATION AND BENEFITS	EMPL BENEFITS & HLTH SVCS	PFB	9	0	0	9	9	0
CORPORATE EXCELLENCE	COMPENSATION AND BENEFITS	COMPENSATION	PFC	2	0	0	2	2	0
CORPORATE EXCELLENCE	INDUSTRIAL RELATIONS	ADMINISTRATION	PPA	3	0	0	3	3	0
CORPORATE EXCELLENCE	INDUSTRIAL RELATIONS	LABOR REL & WAGE ADMIN	PPI	6	0	0	6	6	0
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	CORPORATE SAFETY	PFS	11	0	0	11	12	(1)
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	ADMINISTRATION	PHA	2	0	0	2	2	0
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	FACILITIES OPERATIONS	PHB	12	0	0	12	15	(3)
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	FACILITIES PLANNING	PHF	8	0	0	8	8	0
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	SECURITY	PHS	6	0	0	6	9	(3)
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	CORP HEALTH & WELLNESS	PPH	2	0	0	2	2	0
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	WORKERS COMPENSATION	PPW	2	0	0	2	2	0
CORPORATE EXCELLENCE	VP CORPORATE EXCELLENCE	VP CORPORATE EXCELLENCE	P6V	5	0	0	5	5	0
CORPORATE EXCELLENCE	WORKFORCE STAFFING & DEVELOP	ADMINISTRATION	PFA	4	0	0	4	4	0
CORPORATE EXCELLENCE	WORKFORCE STAFFING & DEVELOP	CLIENT SERVICES & CONSULTING	PFD	9	0	2	11	10	1
CORPORATE EXCELLENCE	WORKFORCE STAFFING & DEVELOP	ORGANIZ DEV & CONTIN IMPRVMT	PFI	3	0	0	3	4	(1)
CORPORATE EXCELLENCE		SUBTOTAL		84	0	2	86	93	(7)
CORPORATE RELATIONS	CORPORATE COMMUNICATIONS	CORPORATE COMMUNICATIONS	PQC	9	0	1	10	10	0
CORPORATE RELATIONS	VP CORPORATE RELATIONS	VP CORPORATE RELATIONS	P1V	3	0	0	3	3	0
CORPORATE RELATIONS		SUBTOTAL		12	0	1	13	13	0
CUSTOMER SOLUTIONS	CUSTOMER TECH APPLICATIONS	CUSTOMER TECH APPLICATIONS	PSR	9	0	1	10	9	1
CUSTOMER SOLUTIONS	ENERGY SERVICES	ADMINISTRATION	PSA	3	0	0	3	3	0
CUSTOMER SOLUTIONS	ENERGY SERVICES	CUSTOMER EFFICIENCY PROGRAM	PSD **	5	0	0	5	5	0
CUSTOMER SOLUTIONS	ENERGY SERVICES	PRICING	PSP	5	0	0	5	5	0
CUSTOMER SOLUTIONS	FORECASTS & RESEARCH	FORECASTS & RESEARCH	PSM	10	0	0	10	10	0
CUSTOMER SOLUTIONS	MARKETING SERVICES	MARKETING SERVICES	PSN	11	0	0	11	12	(1)
CUSTOMER SOLUTIONS	VP CUSTOMER SOLUTIONS	CUSTOMER SOLUTIONS	P1W	2	0	0	2	2	0
CUSTOMER SOLUTIONS		SUBTOTAL		45	0	1	46	46	0
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	ADMINISTRATION	PDA	6	0	0	6	6	0
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	CONTROL SECTION	PDC	6	0	0	6	6	0
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	TRAINING SECTION	PDD	1	0	0	1		1
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	FIELD OPERATION	PDF	23	0	0	23	24	(1)
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	WEST OVERHEAD	PDJ*	45	0	0	45		
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	EAST OVERHEAD-KOOLAU	PKD*	26	0	0	26		
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	EAST OVERHEAD-WARD	PDL *	42	0	0	42		
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	PLANNING	PDP	22	0	2	24	16	8
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	OPERATIONS	PDS*	13	0	0	13	165	(12)
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	UNDERGROUND	PDU*	27	0	0	27		
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	VEGETATION MANAGEMENT	PDV	2	0	0	2	3	(1)
ENERGY DELIVERY	ENGINEERING	ADMINISTRATION	PBA	7	0	0	7	7	0
ENERGY DELIVERY	ENGINEERING	T&D ENGINEERING	PBE	17	0	2	19	18	1
ENERGY DELIVERY	ENGINEERING	PROJECT MANAGEMENT	PBP	7	0	0	7	8	(1)
ENERGY DELIVERY	ENGINEERING	DISTRIBUTION PLANNING	PBS	6	0	1	7	6	1
ENERGY DELIVERY	ENGINEERING	STRUCTURAL	PBT	17	0	1	18	18	0
ENERGY DELIVERY	ENGINEERING	SUBST,PROTECTION&TELECOM	PBY	22	0	2	24	22	2
ENERGY DELIVERY	ENGINEERING	T&D TECHNICAL SERVICES	PBZ	7	0	1	8	9	(1)
ENERGY DELIVERY	SUPPORT SERVICES	ADMINISTRATION	PVA	5	0	0	5	5	0
ENERGY DELIVERY	SUPPORT SERVICES	FLEET	PVF	25	0	0	25	25	0
ENERGY DELIVERY	SUPPORT SERVICES	ELECTRICAL & WELDING SERVICES	PVL	12	0	0	12	12	0
ENERGY DELIVERY	SUPPORT SERVICES	MATERIALS MANAGEMENT	PVM	28	0	0	28	28	0
ENERGY DELIVERY	SUPPORT SERVICES	PURCHASING	PVP	14	0	0	14	15	(1)
ENERGY DELIVERY	SYSTEM OPERATION	ADMINISTRATION	PRA	7	0	0	7	7	0
ENERGY DELIVERY	SYSTEM OPERATION	COMMUNICATIONS	PRC	8	0	0	8	8	0
ENERGY DELIVERY	SYSTEM OPERATION	OPERATING DISPATCH	PRD	26	0	1	27	27	0
ENERGY DELIVERY	SYSTEM OPERATION	OPERATING ENGINEERING	PRE	13	0	0	13	14	(1)
ENERGY DELIVERY	SYSTEM OPERATION	INSTRUMENT & CONTROL	PRI	9	0	0	9	9	0
ENERGY DELIVERY	SYSTEM OPERATION	RELAY	PRR	10	0	0	10	10	0
ENERGY DELIVERY	SYSTEM OPERATION	SUBSTATION	PRS	39	0	0	39	39	0
ENERGY DELIVERY	SYSTEM OPERATION	CONSTRUCTION MANAGEMENT	PRX	3	0	0	3	3	0
ENERGY DELIVERY	VP ENERGY DELIVERY	VP ENERGY DELIVERY	P2V	2	0	0	2	2	0
ENERGY DELIVERY		SUBTOTAL		497	0	10	507	512	(5)
ENERGY SOLUTIONS	CUSTOMER INSTALLATION	ADMINISTRATION	PWA	12	0	0	12	12	0
ENERGY SOLUTIONS	CUSTOMER INSTALLATION	PLANNING & DESIGN	PWP	24	0	0	24	24	0
ENERGY SOLUTIONS	CUSTOMER INSTALLATION	ENGINEERING & METER	PWX	14	0	0	14	15	(1)
ENERGY SOLUTIONS	ENERGY PROJECTS	ENERGY PROJECTS	PNG	9	0	0	9	9	0
ENERGY SOLUTIONS	SR VP ENERGY SOLUTIONS	SR VP ENERGY SOLUTIONS	P9S	4	0	0	4	4	0
ENERGY SOLUTIONS	TECHNOLOGY	TECHNOLOGY	PNR	2	0	1	3	3	0
ENERGY SOLUTIONS		SUBTOTAL		65	0	1	66	67	(1)
FINANCE & ADMIN	GENERAL ACCOUNTING	ADMINISTRATION	PAA	6	0	0	6	6	0
FINANCE & ADMIN	GENERAL ACCOUNTING	CORPORATE ACCOUNTING	PAC	5	0	0	5	5	0
FINANCE & ADMIN	GENERAL ACCOUNTING	COST ACCOUNTING	PAD	10	0	0	10	10	0
FINANCE & ADMIN	GENERAL ACCOUNTING	PROPERTY ACCOUNTING	PAT	5	0	0	5	5	0
FINANCE & ADMIN	INFO TECHNOLOGY & SVCS	ADMINISTRATION	PEA	2	0	0	2	2	0
FINANCE & ADMIN	INFO TECHNOLOGY & SVCS	CUSTOMER CARE	PEC	21	0	0	21	22	(1)
FINANCE & ADMIN	INFO TECHNOLOGY & SVCS	DEVELOPMENT SERVICES	PED	34	0	0	34	35	(1)
FINANCE & ADMIN	INFO TECHNOLOGY & SVCS	INFRASTRUCTURE & OPERATIONS	PEI	23	0	0	23	25	(2)

Hawaiian Electric Company, Inc.
June 30, 2008 Actual Employee Count vs Budget Employee Count

VICE PRESIDENT'S OFFICE	DEPARTMENT NAME	DIVISION NAME	RA	ACTUAL EMPLOYEE COUNT					
				FULL TIME	PART TIME	TEMP	TOTAL	BUDGET	DIFF
FINANCE & ADMIN	INFO TECHNOLOGY & SVCS	INFORMATION ASSURANCE	PEJ	3	0	0	3	2	1
FINANCE & ADMIN	INFO TECHNOLOGY & SVCS	MAILING SERVICES	PEM	8	0	1	9	8	1
FINANCE & ADMIN	MANAGEMENT ACCTG & FIN SVCS	ADMINISTRATION	PKB	3	0	0	3	4	(1)
FINANCE & ADMIN	MANAGEMENT ACCTG & FIN SVCS	BUDGETS	PKC	7	0	0	7	7	0
FINANCE & ADMIN	MANAGEMENT ACCTG & FIN SVCS	FINANCIAL ANALYSIS	PKF	2	0	0	2	3	(1)
FINANCE & ADMIN	MANAGEMENT ACCTG & FIN SVCS	ERP ADMINISTRATION	PKM	3	0	0	3	3	0
FINANCE & ADMIN	MANAGEMENT ACCTG & FIN SVCS	TREASURY	PKT	5	0	1	6	5	1
FINANCE & ADMIN	RISK MANAGEMENT	RISK MANAGEMENT	PKI	8	0	0	8	9	(1)
FINANCE & ADMIN	SR VP FINANCE & ADMIN	SR VP FINANCE & ADMIN	P4V	3	0	0	3	3	0
FINANCE & ADMIN		SUBTOTAL		148	0	2	150	154	(4)
GENERAL COUNSEL	LEGAL	LEGAL	PNC	12	0	0	12	13	(1)
GENERAL COUNSEL	LEGAL	LAND & RIGHTS OF WAY	PNL	5	0	0	5	5	0
GENERAL COUNSEL	VP GENERAL COUNSEL	VP-GENERAL COUNSEL	P5V	2	0	0	2	2	0
GENERAL COUNSEL		SUBTOTAL		19	0	0	19	20	(1)
GOVT & COMMUNITY AFFAIRS	EDUCATION & CONSUMER AFFAIRS	EDUCATION & CONSUMER AFFAIRS	PQE	8	0	0	8	8	0
GOVT & COMMUNITY AFFAIRS	REGULATORY AFFAIRS	REGULATORY AFFAIRS	PNP	11	0	0	11	12	(1)
GOVT & COMMUNITY AFFAIRS	VP GOVT & COMMUNITY AFFAIRS	VP GOVT & COMMUNITY AFFAIRS	P3V	7	0	0	7	7	0
GOVT & COMMUNITY AFFAIRS		SUBTOTAL		26	0	0	26	27	(1)
OPERATIONS	CUSTOMER SERVICE	ADMINISTRATION	PCA	4	0	0	4	5	(1)
OPERATIONS	CUSTOMER SERVICE	CUST ACCOUNTING & BILLING	PCB	5	0	0	5	6	(1)
OPERATIONS	CUSTOMER SERVICE	CREDIT	PCD	3	0	1	4	5	(1)
OPERATIONS	CUSTOMER SERVICE	CUSTOMER FIELD SERVICES	PCF	2	0	1	3	5	(2)
OPERATIONS	CUSTOMER SERVICE	FIELD SERVICE & COLLECTIONS	PCG	25	0	0	25	26	(1)
OPERATIONS	CUSTOMER SERVICE	CUSTOMER ASSISTANCE CENTER	PCH	32	0	0	32	30	2
OPERATIONS	CUSTOMER SERVICE	METER READING	PCM	33	0	9	42	41	1
OPERATIONS	CUSTOMER SERVICE	PAYMT PROCESS & SUPPORT CTR	PCP	16	0	1	17	24	(7)
OPERATIONS	CUSTOMER SERVICE	CUSTOMER ACCOUNT SERVICES	PCS	6	0	0	6	5	1
OPERATIONS	SR VP OPERATIONS	SR VP OPERATIONS	P8V	2	0	0	2	2	0
OPERATIONS		SUBTOTAL		128	0	12	140	149	(9)
POWER SUPPLY	ENVIRONMENTAL	ADMINISTRATION	PJA	4	0	0	4	4	0
POWER SUPPLY	ENVIRONMENTAL	AIR QUALITY & NOISE	PJB	6	0	0	6	6	0
POWER SUPPLY	ENVIRONMENTAL	CHEMISTRY	PJC	6	0	0	6	6	0
POWER SUPPLY	ENVIRONMENTAL	WATER & HAZARDOUS MATERIAL	PJW	8	0	0	8	8	0
POWER SUPPLY	POWER SUPPLY ENGINEERING	ADMINISTRATION	PYA	3	0	0	3	3	0
POWER SUPPLY	POWER SUPPLY ENGINEERING	SUPPORT STAFF	PYC	3	0	0	3	3	0
POWER SUPPLY	POWER SUPPLY ENGINEERING	PS TECHNICAL SERVICES	PYE	10	0	1	11	10	1
POWER SUPPLY	POWER SUPPLY ENGINEERING	POWER PLANT ELECT ENGRG	PYF	12	0	0	12	11	1
POWER SUPPLY	POWER SUPPLY ENGINEERING	POWER PLANT DRAFTING	PYG	2	0	0	2	2	0
POWER SUPPLY	POWER SUPPLY ENGINEERING	POWER PLANT PROJECT MGT	PYJ	4	0	0	4	4	0
POWER SUPPLY	POWER SUPPLY ENGINEERING	POWER PLANT MECH ENGRG	PYM	12	0	1	13	14	(1)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	O&M ADMINISTRATION	PIB	5	0	0	5	10	(5)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	TRAINING	PID	2	0	0	2	3	(1)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	HONOLULU STATION OPERATIONS	PIH	27	0	0	27	27	0
POWER SUPPLY	POWER SUPPLY OPER & MAINT	KAHE STATION OPERATIONS	PIK	61	0	1	62	61	1
POWER SUPPLY	POWER SUPPLY OPER & MAINT	KAHE STATION MAINTENANCE	PIL	29	0	0	29	33	(4)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	MAINTENANCE ADMINISTRATION	PIM	2	0	0	2	2	0
POWER SUPPLY	POWER SUPPLY OPER & MAINT	HONOLULU STATION MAINTENANCE	PIN	10	0	0	10	12	(2)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	OPERATIONS ADMINISTRATION	PIO	1	0	0	1	2	(1)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	PLANNING AND ENGINEERING	PIP	23	0	2	25	24	1
POWER SUPPLY	POWER SUPPLY OPER & MAINT	ENVIRONMENTAL COMPLIANCE	PIQ	4	0	0	4	0	4
POWER SUPPLY	POWER SUPPLY OPER & MAINT	TRAVELING MAINTENANCE	PIT	76	0	0	76	82	(6)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	WAI'AU STATION OPERATIONS	PIW	63	0	0	63	66	(3)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	WAI'AU STATION MAINTENANCE	PIX	31	0	0	31	32	(1)
POWER SUPPLY	POWER SUPPLY SERVICES	SERVICES ADMINISTRATION	PIA	2	0	0	2	2	0
POWER SUPPLY	POWER SUPPLY SERVICES	POWER PURCHASE	PIC	6	0	0	6	6	0
POWER SUPPLY	POWER SUPPLY SERVICES	FUEL RESOURCES	PIF	4	0	0	4	4	0
POWER SUPPLY	POWER SUPPLY SERVICES	FUELS INFRASTRUCTURE	PIJ	3	0	1	4	3	1
POWER SUPPLY	SYSTEM PLANNING	ADMINISTRATION	PXA	2	0	0	2	2	0
POWER SUPPLY	SYSTEM PLANNING	GENERATION BIDDING	PXB	3	0	0	3	3	0
POWER SUPPLY	SYSTEM PLANNING	GENERATION PLANNING	PYB	9	0	0	9	9	0
POWER SUPPLY	SYSTEM PLANNING	TRANSMISSION PLANNING	PYT	6	0	0	6	8	(2)
POWER SUPPLY	VP POWER SUPPLY	VP POWER SUPPLY	P7V	3	0	0	3	2	1
POWER SUPPLY		SUBTOTAL		442	0	6	448	464	(16)
PRESIDENT - HECO	CORPORATE AUDIT & COMPLIANCE	INTERNAL AUDIT	PNA	7	0	4	11	8	3
PRESIDENT - HECO	CORPORATE AUDIT & COMPLIANCE	ADMINISTRATION	PNX	0	0	0	0	1	(1)
PRESIDENT - HECO	PRESIDENTS OFFICE	PRESIDENTS OFFICE	P9P	4	0	0	4	3	1
PRESIDENT - HECO		SUBTOTAL		11	0	4	15	12	3
PUBLIC AFFAIRS	EXEC VP PUBLIC AFFAIRS	EXEC VP PUBLIC AFFAIRS	P9V	2	0	0	2	3	(1)
PUBLIC AFFAIRS	GOVERNMENTAL RELATIONS	GOVERNMENTAL RELATIONS	PNI	3	0	0	3	3	0
PUBLIC AFFAIRS	INTEGRATED RESOURCE PLNG	INTEGRATED RESOURCE PLANNING	PYP	6	0	0	6	6	0
PUBLIC AFFAIRS		SUBTOTAL		11	0	0	11	12	(1)
SR EXECUTIVE VICE PRESIDENT	SR EXECUTIVE VICE PRESIDENT	SR EXECUTIVE VICE PRESIDENT	P9W	0	0	0	0	0	0
SR EXEC VICE PRESIDENT		SUBTOTAL		0	0	0	0	0	0
		COMPANY TOTAL		1488	0	39	1527	1569	(42)

*Forecast Budget count for RA PDS includes RA's PDJ, PDK, PDL & PDU.

**Employee counts in Customer Solutions exclude employees covered under the DSM surcharge.

Hawaiian Electric Company, Inc.
July 31, 2008 Actual Employee Count vs Budget Employee Count

VICE PRESIDENT'S OFFICE	DEPARTMENT NAME	DIVISION NAME	RA	ACTUAL EMPLOYEE COUNT					DIFF
				FULL TIME	PART TIME	TEMP	TOTAL	BUDGET	
CORPORATE EXCELLENCE	COMPENSATION AND BENEFITS	EMPL BENEFITS & HLTH SVCS	PFB	9	0	0	9	9	0
CORPORATE EXCELLENCE	COMPENSATION AND BENEFITS	COMPENSATION	PFC	2	0	0	2	2	0
CORPORATE EXCELLENCE	INDUSTRIAL RELATIONS	ADMINISTRATION	PPA	3	0	0	3	3	0
CORPORATE EXCELLENCE	INDUSTRIAL RELATIONS	LABOR REL & WAGE ADMIN	PPI	6	0	0	6	6	0
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	CORPORATE SAFETY	PFS	10	0	0	10	12	(2)
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	ADMINISTRATION	PHA	2	0	0	2	2	0
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	FACILITIES OPERATIONS	PHB	10	0	1	11	15	(4)
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	FACILITIES PLANNING	PHF	8	0	0	8	8	0
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	SECURITY	PHS	6	0	0	6	9	(3)
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	CORP HEALTH & WELLNESS	PPH	2	0	0	2	2	0
CORPORATE EXCELLENCE	SAFETY, SECURITY & FACILITIES	WORKERS COMPENSATION	PPW	2	0	0	2	2	0
CORPORATE EXCELLENCE	VP CORPORATE EXCELLENCE	VP CORPORATE EXCELLENCE	P6V	5	0	0	5	5	0
CORPORATE EXCELLENCE	WORKFORCE STAFFING & DEVELOP	ADMINISTRATION	PFA	4	0	0	4	4	0
CORPORATE EXCELLENCE	WORKFORCE STAFFING & DEVELOP	CLIENT SERVICES & CONSULTING	PFD	9	0	2	11	10	1
CORPORATE EXCELLENCE	WORKFORCE STAFFING & DEVELOP	ORGANIZ DEV & CONTIN IMPRVMT	PFI	3	0	0	3	4	(1)
CORPORATE EXCELLENCE		SUBTOTAL		81	0	3	84	93	(9)
CORPORATE RELATIONS	CORPORATE COMMUNICATIONS	CORPORATE COMMUNICATIONS	PQC	9	0	1	10	10	0
CORPORATE RELATIONS	VP CORPORATE RELATIONS	VP CORPORATE RELATIONS	P1V	3	0	0	3	3	0
CORPORATE RELATIONS		SUBTOTAL		12	0	1	13	13	0
CUSTOMER SOLUTIONS	CUSTOMER TECH APPLICATIONS	CUSTOMER TECH APPLICATIONS	PSR	9	0	1	10	9	1
CUSTOMER SOLUTIONS	ENERGY SERVICES	ADMINISTRATION	PSA	3	0	0	3	3	0
CUSTOMER SOLUTIONS	ENERGY SERVICES	CUSTOMER EFFICIENCY PROGRAM	PSD**	5	0	0	5	5	0
CUSTOMER SOLUTIONS	ENERGY SERVICES	PRICING	PSP	5	0	0	5	5	0
CUSTOMER SOLUTIONS	FORECASTS & RESEARCH	FORECASTS & RESEARCH	PSM	10	0	0	10	10	0
CUSTOMER SOLUTIONS	MARKETING SERVICES	MARKETING SERVICES	PSN	11	0	0	11	12	(1)
CUSTOMER SOLUTIONS	VP CUSTOMER SOLUTIONS	CUSTOMER SOLUTIONS	P1W	2	0	0	2	2	0
CUSTOMER SOLUTIONS		SUBTOTAL		45	0	1	46	46	0
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	ADMINISTRATION	PDA	6	0	0	6	6	0
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	CONTROL SECTION	PDC	6	0	0	6	6	0
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	TRAINING SECTION	PDD	5	0	0	5		5
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	FIELD OPERATION	PDF	27	0	0	27	24	3
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	WEST OVERHEAD	PDJ*	43	0	0	43		
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	EAST OVERHEAD-KOOLAU	PDK*	26	0	0	26		
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	EAST OVERHEAD-WARD	PDL *	39	0	0	39		
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	PLANNING	PDP	22	0	2	24	16	8
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	OPERATIONS	PDS*	13	0	0	13	165	(17)
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	UNDERGROUND	PDU*	27	0	0	27		
ENERGY DELIVERY	CONSTRUCTION & MAINTENANCE	VEGETATION MANAGEMENT	PDV	2	0	0	2	3	(1)
ENERGY DELIVERY	ENGINEERING	ADMINISTRATION	PBA	7	0	0	7	7	0
ENERGY DELIVERY	ENGINEERING	T&D ENGINEERING	PBE	16	0	2	18	18	0
ENERGY DELIVERY	ENGINEERING	PROJECT MANAGEMENT	PBP	7	0	0	7	8	(1)
ENERGY DELIVERY	ENGINEERING	DISTRIBUTION PLANNING	PBS	6	0	1	7	6	1
ENERGY DELIVERY	ENGINEERING	STRUCTURAL	PBT	16	0	1	17	18	(1)
ENERGY DELIVERY	ENGINEERING	SUBST, PROTECTION & TELECOM	PBY	22	0	2	24	22	2
ENERGY DELIVERY	ENGINEERING	T&D TECHNICAL SERVICES	PBZ	7	0	1	8	9	(1)
ENERGY DELIVERY	SUPPORT SERVICES	ADMINISTRATION	PVA	5	0	0	5	5	0
ENERGY DELIVERY	SUPPORT SERVICES	FLEET	PVF	25	0	0	25	25	0
ENERGY DELIVERY	SUPPORT SERVICES	ELECTRICAL & WELDING SERVICES	PVL	12	0	0	12	12	0
ENERGY DELIVERY	SUPPORT SERVICES	MATERIALS MANAGEMENT	PVM	28	0	0	28	28	0
ENERGY DELIVERY	SUPPORT SERVICES	PURCHASING	PVP	14	0	0	14	15	(1)
ENERGY DELIVERY	SYSTEM OPERATION	ADMINISTRATION	PRA	7	0	0	7	7	0
ENERGY DELIVERY	SYSTEM OPERATION	COMMUNICATIONS	PRC	8	0	0	8	8	0
ENERGY DELIVERY	SYSTEM OPERATION	OPERATING DISPATCH	PRD	26	0	1	27	27	0
ENERGY DELIVERY	SYSTEM OPERATION	OPERATING ENGINEERING	PRE	13	0	0	13	14	(1)
ENERGY DELIVERY	SYSTEM OPERATION	INSTRUMENT & CONTROL	PRI	9	0	0	9	9	0
ENERGY DELIVERY	SYSTEM OPERATION	RELAY	PRR	10	0	0	10	10	0
ENERGY DELIVERY	SYSTEM OPERATION	SUBSTATION	PRS	39	0	0	39	39	0
ENERGY DELIVERY	SYSTEM OPERATION	CONSTRUCTION MANAGEMENT	PRX	3	0	0	3	3	0
ENERGY DELIVERY	VP ENERGY DELIVERY	VP ENERGY DELIVERY	P2V	2	0	0	2	2	0
ENERGY DELIVERY		SUBTOTAL		498	0	10	508	512	(4)
ENERGY SOLUTIONS	CUSTOMER INSTALLATION	ADMINISTRATION	PWA	12	0	0	12	12	0
ENERGY SOLUTIONS	CUSTOMER INSTALLATION	PLANNING & DESIGN	PWP	24	0	0	24	24	0
ENERGY SOLUTIONS	CUSTOMER INSTALLATION	ENGINEERING & METER	PWX	15	0	0	15	17	(2)
ENERGY SOLUTIONS	ENERGY PROJECTS	ENERGY PROJECTS	PNG	9	0	0	9	9	0
ENERGY SOLUTIONS	SR VP ENERGY SOLUTIONS	SR VP ENERGY SOLUTIONS	P9S	4	0	0	4	4	0
ENERGY SOLUTIONS	TECHNOLOGY	TECHNOLOGY	PNR	2	0	1	3	3	0
ENERGY SOLUTIONS		SUBTOTAL		66	0	1	67	69	(2)
FINANCE & ADMIN	GENERAL ACCOUNTING	ADMINISTRATION	PAA	6	0	0	6	6	0
FINANCE & ADMIN	GENERAL ACCOUNTING	CORPORATE ACCOUNTING	PAC	5	0	0	5	5	0
FINANCE & ADMIN	GENERAL ACCOUNTING	COST ACCOUNTING	PAD	10	0	0	10	10	0
FINANCE & ADMIN	GENERAL ACCOUNTING	PROPERTY ACCOUNTING	PAT	5	0	0	5	5	0
FINANCE & ADMIN	INFO TECHNOLOGY & SVCS	ADMINISTRATION	PEA	2	0	0	2	2	0
FINANCE & ADMIN	INFO TECHNOLOGY & SVCS	CUSTOMER CARE	PEC	21	0	0	21	22	(1)
FINANCE & ADMIN	INFO TECHNOLOGY & SVCS	DEVELOPMENT SERVICES	PED	33	0	0	33	35	(2)
FINANCE & ADMIN	INFO TECHNOLOGY & SVCS	INFRASTRUCTURE & OPERATIONS	PEI	23	0	0	23	25	(2)

Hawaiian Electric Company, Inc.
July 31, 2008 Actual Employee Count vs Budget Employee Count

VICE PRESIDENT'S OFFICE	DEPARTMENT NAME	DIVISION NAME	RA	ACTUAL EMPLOYEE COUNT					DIFF
				FULL TIME	PART TIME	TEMP	TOTAL	BUDGET	
FINANCE & ADMIN	INFO TECHNOLOGY & SVCS	INFORMATION ASSURANCE	PEJ	3	0	0	3	2	1
FINANCE & ADMIN	INFO TECHNOLOGY & SVCS	MAILING SERVICES	PEM	8	0	1	9	8	1
FINANCE & ADMIN	MANAGEMENT ACCTG & FIN SVCS	ADMINISTRATION	PKB	4	0	0	4	4	0
FINANCE & ADMIN	MANAGEMENT ACCTG & FIN SVCS	BUDGETS	PKC	7	0	0	7	7	0
FINANCE & ADMIN	MANAGEMENT ACCTG & FIN SVCS	FINANCIAL ANALYSIS	PKF	2	0	0	2	3	(1)
FINANCE & ADMIN	MANAGEMENT ACCTG & FIN SVCS	ERP ADMINISTRATION	PKM	3	0	0	3	3	0
FINANCE & ADMIN	MANAGEMENT ACCTG & FIN SVCS	TREASURY	PKT	5	0	1	6	5	1
FINANCE & ADMIN	RISK MANAGEMENT	RISK MANAGEMENT	PKI	9	0	0	9	9	0
FINANCE & ADMIN	SR VP FINANCE & ADMIN	SR VP FINANCE & ADMIN	P4V	3	0	0	3	3	0
FINANCE & ADMIN		SUBTOTAL		149	0	2	151	154	(3)
GENERAL COUNSEL	LEGAL	LEGAL	PNC	12	0	0	12	13	(1)
GENERAL COUNSEL	LEGAL	LAND & RIGHTS OF WAY	PNL	5	0	0	5	5	0
GENERAL COUNSEL	VP GENERAL COUNSEL	VP-GENERAL COUNSEL	P5V	2	0	0	2	2	0
GENERAL COUNSEL		SUBTOTAL		19	0	0	19	20	(1)
GOVT & COMMUNITY AFFAIRS	EDUCATION & CONSUMER AFFAIRS	EDUCATION & CONSUMER AFFAIRS	PQE	7	0	0	7	8	(1)
GOVT & COMMUNITY AFFAIRS	REGULATORY AFFAIRS	REGULATORY AFFAIRS	PNP	11	0	0	11	15	(4)
GOVT & COMMUNITY AFFAIRS	VP GOVT & COMMUNITY AFFAIRS	VP GOVT & COMMUNITY AFFAIRS	P3V	7	0	0	7	7	0
GOVT & COMMUNITY AFFAIRS		SUBTOTAL		25	0	0	25	30	(5)
OPERATIONS	CUSTOMER SERVICE	ADMINISTRATION	PCA	4	0	0	4	5	(1)
OPERATIONS	CUSTOMER SERVICE	CUST ACCOUNTING & BILLING	PCB	5	0	0	5	6	(1)
OPERATIONS	CUSTOMER SERVICE	CREDIT	PCD	4	0	0	4	5	(1)
OPERATIONS	CUSTOMER SERVICE	CUSTOMER FIELD SERVICES	PCF	2	0	1	3	5	(2)
OPERATIONS	CUSTOMER SERVICE	FIELD SERVICE & COLLECTIONS	PCG	25	0	0	25	26	(1)
OPERATIONS	CUSTOMER SERVICE	CUSTOMER ASSISTANCE CENTER	PCH	32	0	0	32	30	2
OPERATIONS	CUSTOMER SERVICE	METER READING	PCM	33	0	9	42	41	1
OPERATIONS	CUSTOMER SERVICE	PAYMT PROCESS & SUPPORT CTR	PCP	15	0	2	17	24	(7)
OPERATIONS	CUSTOMER SERVICE	CUSTOMER ACCOUNT SERVICES	PCS	6	0	0	6	5	1
OPERATIONS	SR VP OPERATIONS	SR VP OPERATIONS	P8V	2	0	0	2	2	0
OPERATIONS		SUBTOTAL		128	0	12	140	149	(9)
POWER SUPPLY	ENVIRONMENTAL	ADMINISTRATION	PJA	4	0	0	4	4	0
POWER SUPPLY	ENVIRONMENTAL	AIR QUALITY & NOISE	PJB	6	0	0	6	6	0
POWER SUPPLY	ENVIRONMENTAL	CHEMISTRY	PJC	6	0	0	6	6	0
POWER SUPPLY	ENVIRONMENTAL	WATER & HAZARDOUS MATERIAL	PJW	8	0	0	8	8	0
POWER SUPPLY	POWER SUPPLY ENGINEERING	ADMINISTRATION	PYA	3	0	0	3	3	0
POWER SUPPLY	POWER SUPPLY ENGINEERING	SUPPORT STAFF	PYC	3	0	0	3	3	0
POWER SUPPLY	POWER SUPPLY ENGINEERING	PS TECHNICAL SERVICES	PYE	10	0	1	11	10	1
POWER SUPPLY	POWER SUPPLY ENGINEERING	POWER PLANT ELECT ENGRG	PYF	11	0	1	12	11	1
POWER SUPPLY	POWER SUPPLY ENGINEERING	POWER PLANT DRAFTING	PYG	2	0	0	2	2	0
POWER SUPPLY	POWER SUPPLY ENGINEERING	POWER PLANT PROJECT MGT	PYJ	4	0	0	4	4	0
POWER SUPPLY	POWER SUPPLY ENGINEERING	POWER PLANT MECH ENGRG	PYM	13	0	0	13	14	(1)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	O&M ADMINISTRATION	PIB	5	0	0	5	10	(5)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	TRAINING	PID	2	0	0	2	3	(1)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	HONOLULU STATION OPERATIONS	PIH	27	0	0	27	27	0
POWER SUPPLY	POWER SUPPLY OPER & MAINT	KAHE STATION OPERATIONS	PIK	61	0	1	62	61	1
POWER SUPPLY	POWER SUPPLY OPER & MAINT	KAHE STATION MAINTENANCE	PTL	30	0	0	30	33	(3)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	MAINTENANCE ADMINISTRATION	PIM	2	0	0	2	2	0
POWER SUPPLY	POWER SUPPLY OPER & MAINT	HONOLULU STATION MAINTENANCE	PIN	10	0	0	10	12	(2)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	OPERATIONS ADMINISTRATION	PIO	1	0	0	1	2	(1)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	PLANNING AND ENGINEERING	PIP	23	0	2	25	24	1
POWER SUPPLY	POWER SUPPLY OPER & MAINT	ENVIRONMENTAL COMPLIANCE	PIQ	4	0	0	4		4
POWER SUPPLY	POWER SUPPLY OPER & MAINT	TRAVELING MAINTENANCE	PIT	77	0	0	77	82	(5)
POWER SUPPLY	POWER SUPPLY OPER & MAINT	WAI'AU STATION OPERATIONS	PIW	67	0	0	67	66	1
POWER SUPPLY	POWER SUPPLY OPER & MAINT	WAI'AU STATION MAINTENANCE	PIX	29	0	0	29	32	(3)
POWER SUPPLY	POWER SUPPLY SERVICES	SERVICES ADMINISTRATION	PIA	2	0	0	2	2	0
POWER SUPPLY	POWER SUPPLY SERVICES	POWER PURCHASE	PIC	6	0	0	6	6	0
POWER SUPPLY	POWER SUPPLY SERVICES	FUEL RESOURCES	PIF	4	0	0	4	4	0
POWER SUPPLY	POWER SUPPLY SERVICES	FUELS INFRASTRUCTURE	PIJ	3	0	1	4	3	1
POWER SUPPLY	SYSTEM PLANNING	ADMINISTRATION	PXA	2	0	0	2	2	0
POWER SUPPLY	SYSTEM PLANNING	GENERATION BIDDING	PXB	3	0	0	3	3	0
POWER SUPPLY	SYSTEM PLANNING	GENERATION PLANNING	PYB	9	0	0	9	9	0
POWER SUPPLY	SYSTEM PLANNING	TRANSMISSION PLANNING	PYT	6	0	0	6	8	(2)
POWER SUPPLY	VP POWER SUPPLY	VP POWER SUPPLY	P7V	3	0	0	3	2	1
POWER SUPPLY		SUBTOTAL		446	0	6	452	464	(12)
PRESIDENT - HECO	CORPORATE AUDIT & COMPLIANCE	INTERNAL AUDIT	PNA	7	0	4	11	8	3
PRESIDENT - HECO	CORPORATE AUDIT & COMPLIANCE	ADMINISTRATION	PNX	0	0	0	0	3	(3)
PRESIDENT - HECO	PRESIDENTS OFFICE	PRESIDENTS OFFICE	P9P	4	0	0	4	3	1
PRESIDENT - HECO		SUBTOTAL		11	0	4	15	14	1
PUBLIC AFFAIRS	EXEC VP PUBLIC AFFAIRS	EXEC VP PUBLIC AFFAIRS	P9V	2	0	0	2	3	(1)
PUBLIC AFFAIRS	GOVERNMENTAL RELATIONS	GOVERNMENTAL RELATIONS	PNI	2	0	0	2	3	(1)
PUBLIC AFFAIRS	INTEGRATED RESOURCE PLNG	INTEGRATED RESOURCE PLANNING	PYP	6	0	0	6	6	0
PUBLIC AFFAIRS		SUBTOTAL		10	0	0	10	12	(2)
		COMPANY TOTAL		1490	0	40	1530	1576	(46)

*Forecast Budget count for RA PDS includes RA's PDJ, PDK, PDL & PDU.

**Employee counts in Customer Solutions exclude employees covered under the DSM surcharge.

HAWAIIAN ELECTRIC INDUSTRIES, INC.
EMPLOYEE COUNT

Department Name	Notes	RA	1ST QTR 2006		2ND QTR 2006		3RD QTR 2006		4TH QTR 2006	
			Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget
President's Office		9Z	2	2	2	2	2	2	2	2
Internal Audit	(6)	ZA	0	0	0	0	0	0	0	0
VP Administration	(10)	Z3	4	4	4	4	4	4	4	4
VP Finance	(9)	Z4	2	2	2	2	2	2	2	2
Controller's Department	(8)	4C	7	7	7	7	7	7	7	7
Taxes	(4)	4P	7	7	7	7	7	7	7	7
Investor Relations	(3)	TI	2	2	2	2	3	2	3	2
Benefit Plan Asset Management	(5)	4T	2	2	2	2	2	2	2	2
Corporate Finance and Investments		4F	1	1	1	1	1	1	1	1
Stock Transfer	(2)	TT	5	5	5	4	4	5	4	5
Enterprise Risk		4R	1	1	1	1	1	1	1	1
Information Technology Department	(1)	Z6	6	6	5	6	5	6	5	6
VP External Affairs		Z7	2	2	2	2	2	2	2	2
VP General Counsel	(7)	Z8	0	0	0	0	0	0	0	0
Community Relations	(3)	9C	2	2	2	2	2	2	2	2
TOTAL			43	43	42	43	42	43	42	43

Notes:

- (1) 2006: VP Information Systems retired in 05/06 (department was renamed Information Technology department).
- (2) 2006: Transfer of (1) Stock Transfer employee to the Investor Relations department effective 08/06.
- (3) 2007: Community Relations secretary retired in 02/07; Director terminated in 5/07.
- (4) 2007: (1) vacant tax accountant position as of 03/31/07; filled in 6/07.
- (5) 2006 - 2008: (1) part-time employee in the Benefit Plan Asset Management department effective 10/05.
- (6) 2007: Internal Auditor hired in 7/07.
- (7) 2007: VP General Counsel hired in 8/07; Director of Enterprise Risk and VP External Affairs secretary were transferred to VP General Counsel's office effective 1/08.
- (8) 2007: Administrator hired for executive compensation in 8/07.
- (9) 2008: VP Finance and secretary transferred to HECO in 2/08; secretary returned in 6/08.
- (10) 2008: VP Administration's secretary retired in 7/08.

*All employee counts are full-time unless otherwise indicated.

HAWAIIAN ELECTRIC INDUSTRIES, INC.
EMPLOYEE COUNT

Department Name	Notes	RA	1ST QTR 2007		2ND QTR 2007		3RD QTR 2007		4TH QTR 2007		1ST QTR 2008		2ND QTR 2008		3RD QTR 2008	
			Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget
President's Office		9Z	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Internal Audit	(6)	ZA	0	0	0	0	1	0	1	0	1	1	1	1	1	1
VP Administration	(10)	Z3	4	4	4	4	4	4	4	4	4	4	4	4	4	4
VP Finance	(9)	Z4	2	2	2	2	2	2	2	2	0	2	1	2	1	2
Controller's Department	(8)	4C	7	7	7	7	8	7	8	7	8	8	8	8	8	8
Taxes	(4)	4P	6	7	7	7	7	7	7	7	7	7	7	7	7	7
Investor Relations	(3)	TI	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Benefit Plan Asset Management	(5)	4T	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Corporate Finance and Investments		4F	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Stock Transfer	(2)	TT	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Enterprise Risk		4R	1	1	1	1	1	1	1	1	0	0	0	0	0	0
Information Technology Department	(1)	Z6	5	5	5	5	5	5	5	5	5	5	5	5	5	5
VP External Affairs		Z7	2	2	2	2	2	2	2	2	1	2	1	2	1	2
VP General Counsel	(7)	Z8	0	0	0	0	1	0	1	0	3	2	3	2	3	2
Community Relations	(3)	9C	1	2	0	0	0	2	0	0	0	0	0	0	0	0
TOTAL			40	42	40	42	43	42	43	42	41	43	42	43	42	43

Notes:

- (1) 2006: VP Information Systems retired in 05/06 (department was renamed Information Technology department).
- (2) 2006: Transfer of (1) Stock Transfer employee to the Investor Relations department effective 08/06.
- (3) 2007: Community Relations secretary retired in 02/07; Director terminated in 5/07.
- (4) 2007: (1) vacant tax accountant position as of 03/31/07; filled in 6/07.
- (5) 2006 - 2008: (1) part-time employee in the Benefit Plan Asset Management department effective 10/05.
- (6) 2007: Internal Auditor hired in 7/07.
- (7) 2007: VP General Counsel hired in 8/07; Director of Enterprise Risk and VP External Affairs secretary were transferred to VP General Counsel's office effective 1/08.
- (8) 2007: Administrator hired for executive compensation in 8/07.
- (9) 2008: VP Finance and secretary transferred to HECO in 2/08; secretary returned in 6/08.
- (10) 2008: VP Administration's secretary retired in 7/08.

*All employee counts are full-time unless otherwise indicated.

Hawaiian Electric Company, Inc.
Revised Summary Recorded and Average Number of Employees

	A	B	C	D	E	F	G	H	I
	2006 Recorded EOY	2006 Year Average	2007 Recorded EOY	2007 Year Average	2008 YTD Recorded 3/31/08	2008 Projected EOY	2008 EOY Budget	2009 EOY Test Year	2009 TEST YEAR Average
President's Office									
Corporate Audit & Compliance (Formerly Internal Audit)	10	11	9	10	8	11	11	13	13
President's Office	2	3	3	3	4	4	3	4	4
Subtotal	12	14	12	13	12	15	14	17	17
Sr. Exec VP					2	2	0	2	2
VP-Corporate Excellence									
Compensation & Benefits	13	13	10	12	10	11	11	11	11
Industrial Relations	9	9	9	8	9	9	9	9	9
Safety, Security & Facilities	42	45	47	44	46	51	51	52	52
Workforce Staffing & Development	16	16	17	3	16	17	18	25	25
VP-Corporate Excellence's Office	2	2	4	17	4	5	5	4	4
Subtotal	82	85	87	84	85	93	94	101	101
SVP-Finance & Administration									
General Accounting	26	26	26	25	26	26	26	27	27
Information Technology & Services	95	93	89	92	88	96	94	97	97
Management Accounting & Fin Svcs	22	22	20	21	20	22	22	22	22
Risk Management	9	9	9	9	9	9	9	9	9
Financial VP/Treasurer's Office	4	3	3	4	3	3	3	3	3
Subtotal	156	153	147	151	146	156	154	158	158
VP-General Counsel									
Legal/Land and Rights of Way	16	16	15	16	16	17	18	17	17
VP-Gen Counsel's Office	2	2	2	2	2	2	2	2	2
Subtotal	18	18	17	18	18	19	20	19	19
Sr. VP-Energy Solutions									
Customer Installations	44	47	50	46	50	51	53	55	55
Energy Projects	8	8	9	9	9	9	9	9	9
Technology	3	3	3	3	3	3	3	3	3
Sr. VP-Energy Solutions' Office	4	4	4	4	4	4	4	4	4
Subtotal	59	62	66	62	66	67	69	71	71
VP-Customer Solutions*									
Customer Technology Applications	8	8	9	9	9	9	9	9	9
Energy Services*	17	16	12	11	13	13	13	15	15
Forecasts & Research*	9	10	10	10	10	10	10	10	10
Integrated Resource Planning	6	5	Moved to EVP Public Affairs as of 3/15/07						
Marketing Services	11	11	11	12	11	12	12	12	12
VP-Customer Solutions' Office	2	2	2	2	2	2	2	2	2
Subtotal	53	52	44	44	45	45	46	48	48
Sr. VP-Operations									
Customer Service	126	127	136	132	142	147	147	148	148
Sr. VP-Operations' Office	3	3	2	2	2	2	2	2	2
Subtotal	129	130	138	134	144	149	149	150	150
VP-Energy Delivery									
Construction & Maintenance	220	212	215	216	213	220	220	220	220
Engineering	84	85	83	86	84	85	88	85	85
Support Services	80	80	84	82	84	85	85	85	85
System Operation	105	108	114	110	115	118	118	118	118
VP-Energy Delivery's Office	2	2	2	2	2	2	2	2	2
Subtotal	491	487	498	496	498	510	513	510	510
VP-Power Supply									
Environmental	22	22	24	22	24	24	24	25	25
Power Supply Engineering (formerly Planning & Engineering)	40	38	46	44	47	47	47	52	52
Power Supply Operations & Maintenance**	316	307	333	326	333	350	354	375	375
Power Supply Services	28	29	13	12	12	15	15	15	15
System Planning	0	0	19	19	19	22	22	22	22
VP-Power Supply's Office	2	2	2	2	3	3	2	3	3
Subtotal	408	398	437	425	438	461	464	492	492
VP-Special Projects	3	3	Special Projects Department dissolved in January of 2007						
Exec. VP-Public Affairs									
Governmental Relations	2	3	3	3	3	3	3	3	3
Integrated Resource Planning			5	5	5	5	6	6	6
EVP-Public Affairs' Office	3	2	3	3	2	2	3	2	2
Subtotal	5	5	11	11	10	11	12	11	11
VP-Corporate Relations									
Corporate Communications	8	12	9	8	9	9	10	9	9
VP-Corporate Relations' Office	3	2	3	3	3	3	3	3	3
Subtotal	11	14	12	11	12	12	13	12	12
VP-Government & Community Affairs									
Education & Consumer Affairs	8	8	8	7	8	8	8	8	8
Regulatory Affairs	7	7	9	9	10	15	15	15	15
VP-Gov't & Comm Affairs' Office	7	7	7	7	7	7	7	7	7
Subtotal	22	22	24	23	25	30	30	30	30
Company Total	1449	1443	1493	1477	1501	1570	1578	1621	1621

* Employee counts include interns and temporary employees on HECO payroll, but exclude employees covered under the DSM surcharge adjustment docket from all years.

** 2006 and 2007 recorded EOY and 3/31/08 recorded counts increased by one due to the reinstatement one employee count in PSO&M under VP Power Supply

*** HECO-1503 submitted in direct testimony incorrectly included the 6 DSM employees in the 2007 Recorded EOY total (but not in the Customer Solutions total employee count).

CA-IR-31

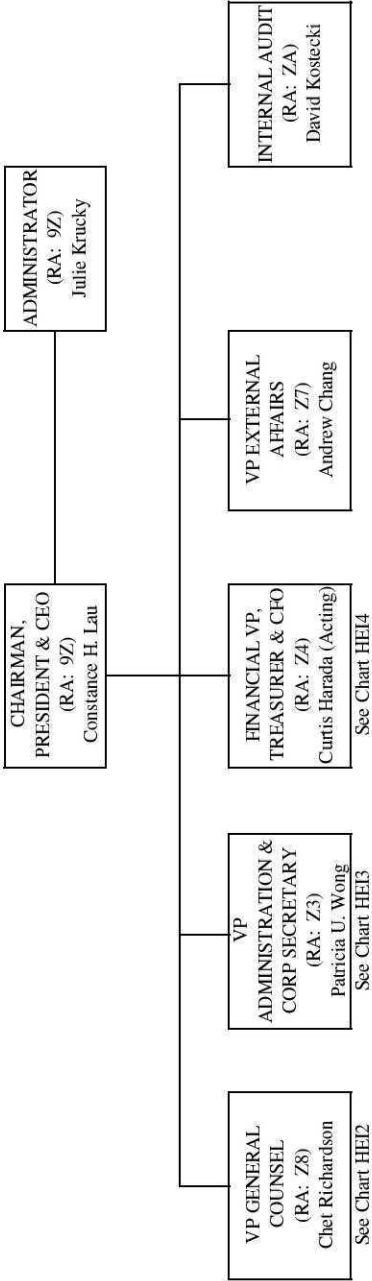
Please provide a complete copy of the most current available HEI management organization charts, illustrating reporting relationships among management personnel, departmental organizations and relative staffing levels within each department, including an explanation of which departments are supportive of HECO operations and the services/activities provided.

HECO Response:

See pages 2 to 8 of this response for HEI's management organization charts as of August 11, 2008, with their respective staffing levels. For the list of HEI departments that support HECO operations and the service/activities provided, see pages 9 to 11 of this response.

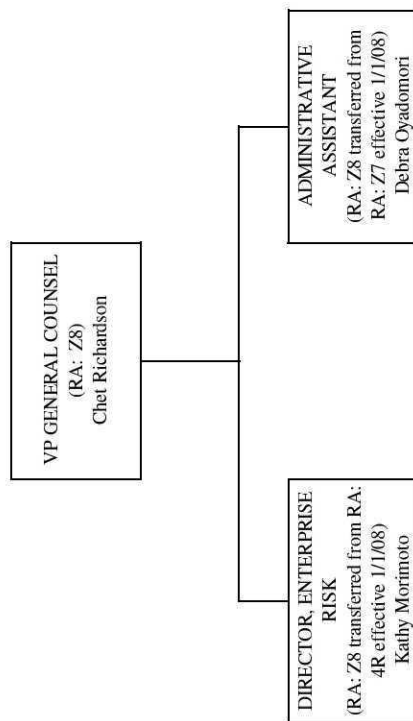
HAWAIIAN ELECTRIC INDUSTRIES, INC.

RA: 9Z (2 employees), RA: Z7 (1 employee), RA: ZA (1 employee), other RAs shown on Charts HEI2 through HEI4



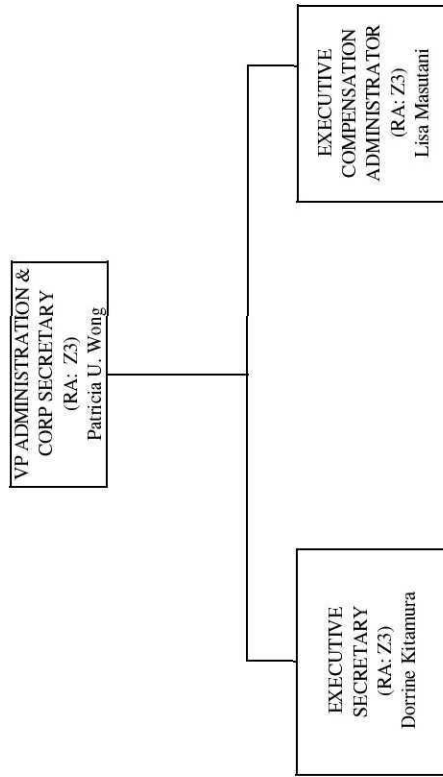
GENERAL COUNSEL

RA: Z8 (3 employees)



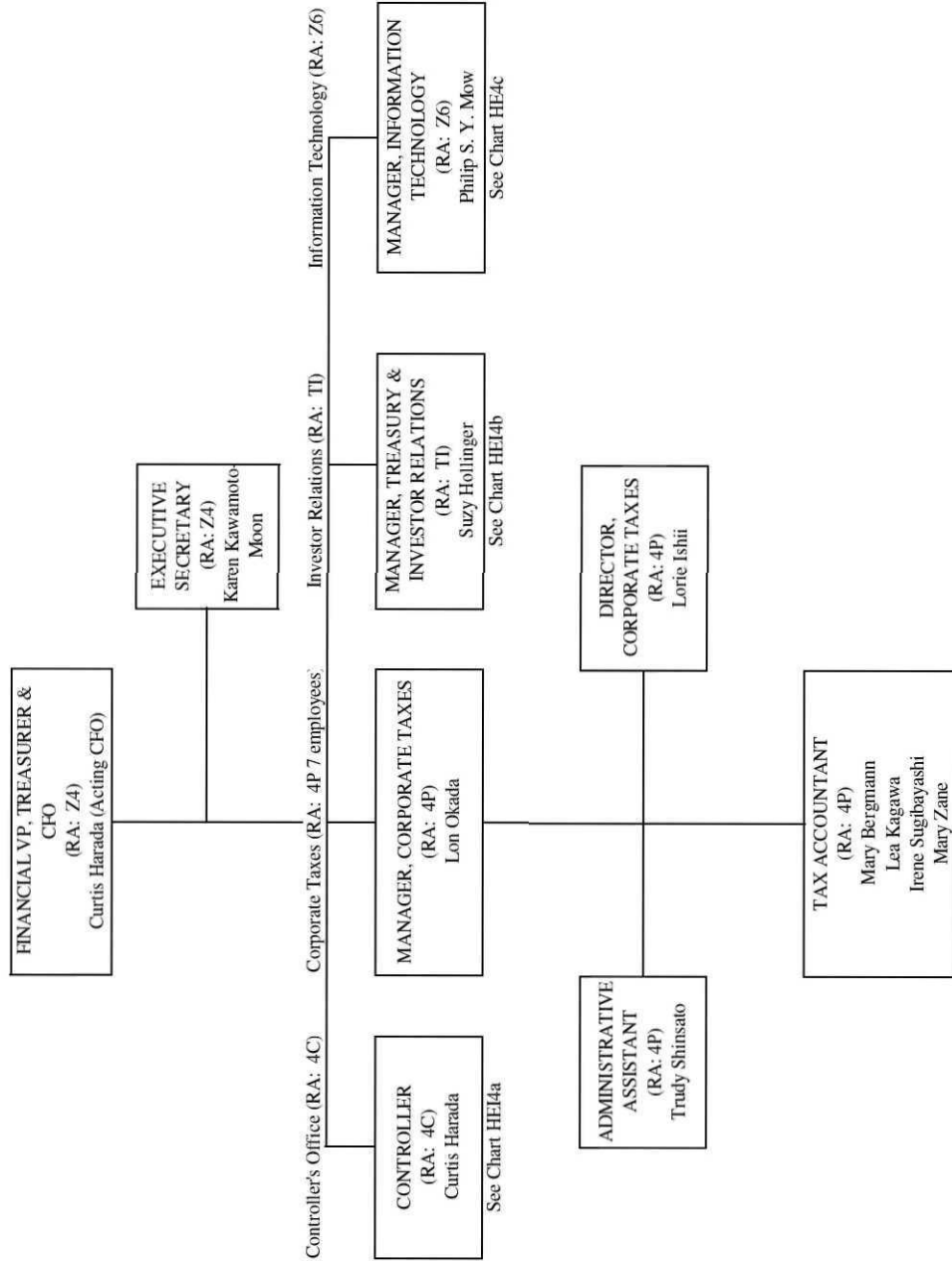
ADMINISTRATION

RA: Z3 (3 employees)



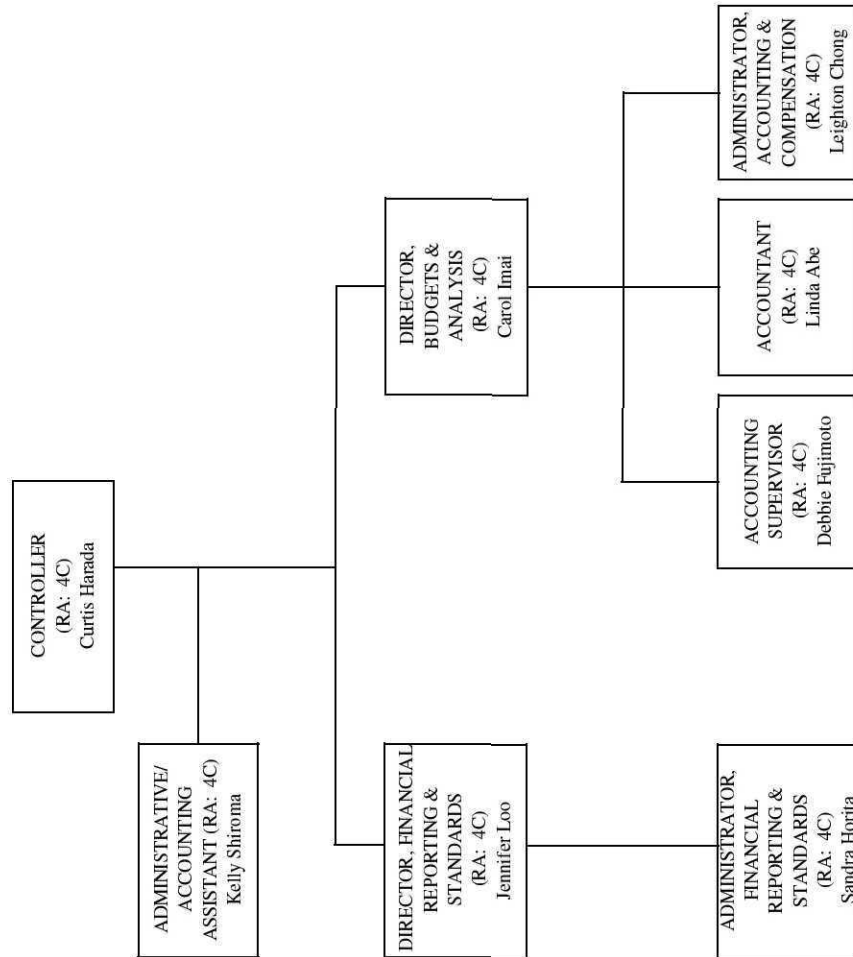
FINANCE

RAs Z4 (2 employees), 4C (shown on Chart HEI4a), 4P (7 employees), TI (shown on Chart HEI4b), Z6 (shown on Chart HEI4c)



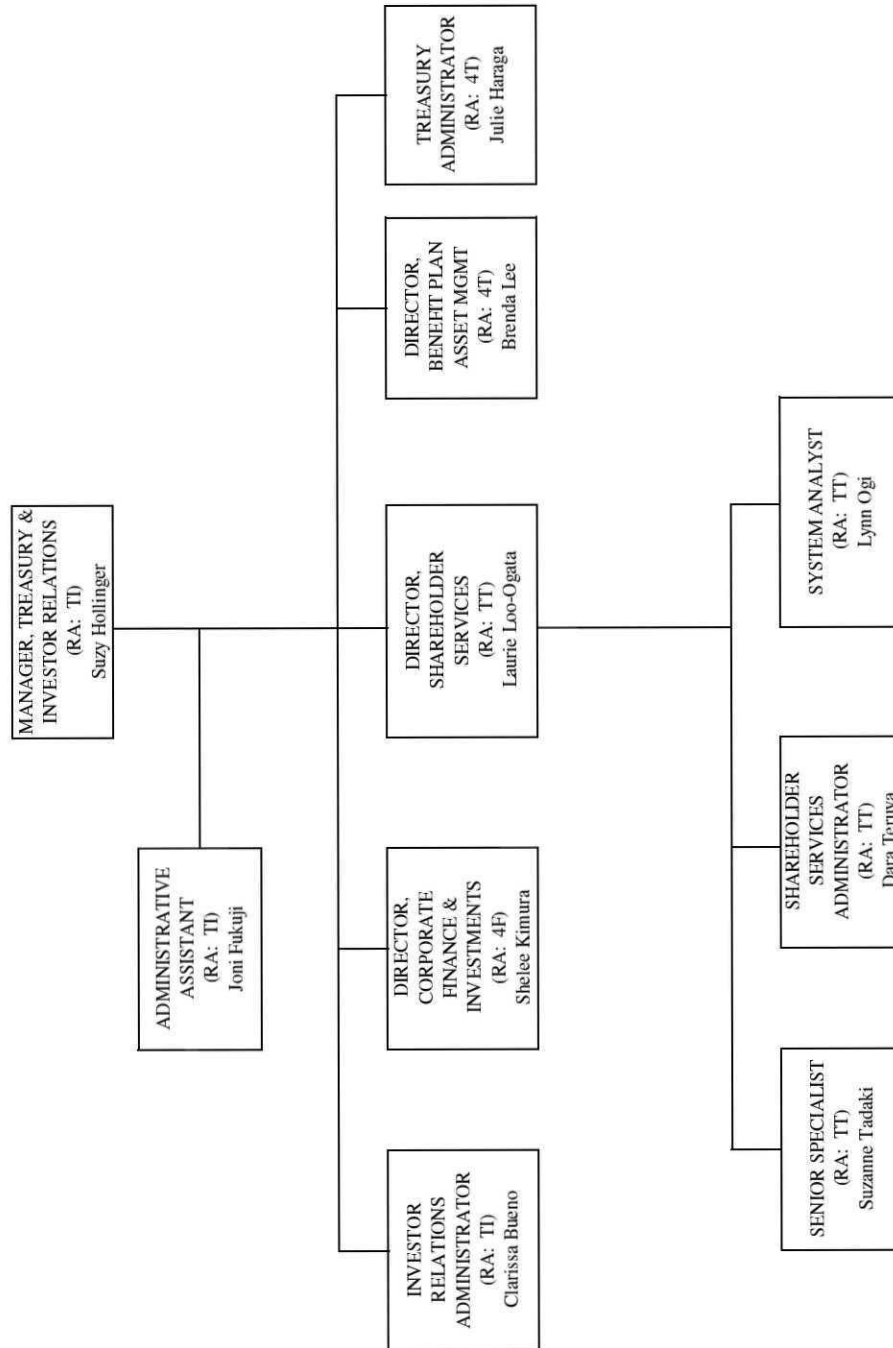
CONTROLLER'S OFFICE

RA: 4C (8 employees)



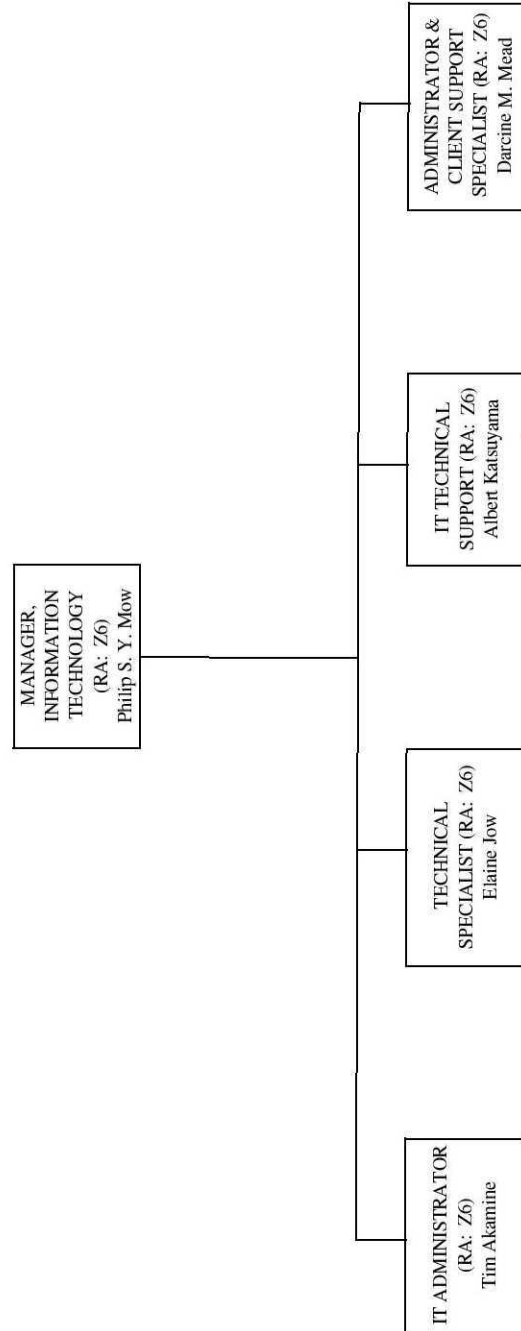
INVESTOR RELATIONS

RAs TI (3 employees), 4F (1 employee), TT (4 employees) and 4T (2 employees)



INFORMATION TECHNOLOGY

RA: Z6 (5 employees)



HEI CHARGES TO HECO

Activity code	ACTIVITY CODE DESCRIPTIONS	HEI Employees that support HECO operations and the activities provided
ACC	Accounting	Finance employees
ACC 001	Research accounting issues	
ACC 004	Maintain general ledger	
ACC 009	Monitor accounting and reporting standards	
ACC 018	Intercompany billing administration	
ADM	Administrative	Finance, General Counsel and Administration employees and the HEI President who is also HECO's Chairman of the Board
ADM 004	Maintenance of corporate records	
ADM 006	Assist on rate cases	
ADM 007	Corporate risk review	
ADM 008	Administration of company policies	
ADM 010	Training rooms	
ADM 011	Telephone charges	
ADM 012	Rent - ASB Tower	
ADM 014	Rent - Central Pacific	
ADM 015	Assist on HELCO rate case	
ADM 016	Assist on MECO rate case	
ANN	Annual meeting	Finance and Administration employees and the HEI President who is also HECO's Chairman of the Board
ANN 001	Annual shareholder meeting planning & coordination	
ANN 002	Annual meeting facilities	
AUD	Audits	HEI President who is also HECO's Chairman of the Board and Administration employees (records minutes of the joint HEI/HECO audit committee meeting)
AUD 004	Audit Committee meeting preparation	
AUD 005	Audit Committee meeting attendance	
AUD 006	Coordinate activities with external auditors	
BOD	Board of Directors	Administration employees, Administrator to the HEI President and the HEI President who is also HECO's Chairman of the Board
BOD 001	Board of Directors meetings	
BOD 002	Attendance (presentations)	
BOD 003	Minutes	
BOD 004	Review of minutes	
BOD 005	Misc. board matters	
CON	Consulting - general	General Counsel and Internal Audit employees and the HEI President who is also HECO's Chairman of the Board
CON 002	Meetings	
CON 015	HECO Internal Audit	
CON 016	VP General Counsel	
FIN	Financing	Finance employees
FIN 002	Debt financing due diligence	
FIN 009	Rating agency matters	

HEI CHARGES TO HECO

Activity code	ACTIVITY CODE DESCRIPTIONS	HEI Employees that support HECO operations and the activities provided
HUM	Human Resources	Administration, Finance and General Counsel employees and the HEI President who is also HECO's Chairman of the Board
HUM 001	Benefits consulting services	
HUM 002	Compensation consulting services	
HUM 003	Personnel issues	
HUM 008	Code of Conduct development and administrative assistance	
HUM 010	Compensation committee meetings	
HUM 011	Long-term incentive plan (LTIP)	
HUM 012	Executive incentive compensation plan (EICP)	
HUM 013	Stock options with dividend equivalents	
HUM 015	Executives deferred compensation	
HUM 017	Executive incentive compensation consulting services	
HUM 018	Other incentive compensation consulting services	
HUM 019	Executive Compensation - Sarbanes Oxley Related Charges	
HUM 023	Restricted stock grants	
HUM 024	Directors compensation	
INV	Investor Relations	Finance employees (primarily from the Investor Relations area) and the HEI President's office (HEI President is also HECO's Chairman of the Board)
INV 001	Analyst/media communications	
INV 003	Fact sheet	
INV 004	Financial mailing list	
INV 005	Financial news releases	
INV 006	Group analyst meetings	
INV 007	HEI stock - share forecast	
INV 008	Investor base/stockholder monitoring	
INV 009	Investor relations planning	
INV 012	One-on-one meetings/visits with analysts	
INV 013	Other investor relations activities	
INV 014	Retail program	
INV 015	Retail/broker/shareholder communications	
INV 018	Statistical supplement	
INV 019	Surveys	
INV 020	Teleconferencing	
INV 022	Investor Relations-Sarbanes Oxley Related Charges	
PEN	Pension plan	Finance and Administration employees and the HEI President's office (HEI President is also HECO's Chairman of the Board)
PEN 005	HEIRS	
PEN 007	HEI Retirement Plan	
PEN 009	Master pension trust	
PEN 010	Pension-Sarbanes Oxley Related Charges	
PEN 022	Supplemental Executive Retirement Plan	
PEN 025	HECO OPEB NBU VEBA	
PEN 026	OPEB funded plans/trusts	
PEN 027	Excess plans	
PEN 028	HECO OPEB Plan	
PEN 030	HEI postretirement electric discount trust	

HEI CHARGES TO HECO

Activity code	ACTIVITY CODE DESCRIPTIONS	HEI Employees that support HECO operations and the activities provided
RPT	Reports	Finance, Administration and General Counsel employees and the HEI President's office (HEI President is also HECO's Chairman of the Board)
RPT 001	10K preparation	
RPT 004	10K - Sarbanes Oxley Related Charges	
RPT 011	10Q preparation	
RPT 021	8K preparation	
RPT 041	Proxy preparation	
RPT 045	Proxy printing and mailing	
RPT 051	Annual report preparation	
RPT 055	Annual report printing and mailing	
RPT 098	Financial Reporting-Sarbanes Oxley Related Charges	
STO	Stock Transfer activities	Finance (primarily from the Shareholder Services area) and General Counsel employees
STO 001	Preferred stock dividend payments	
STO 003	Form 1099 (for preferred stockholders)	
STO 004	Preferred stockholder database maintenance	
STO 006	Preferred stock transfer administrative activities	
STO 011	Common stock dividend payments	
STO 012	HEI dividend reinvestment program administration	
STO 013	Form 1099 Dividends	
STO 014	Common stockholder database maintenance	
STO 015	Other common stock communications	
STO 016	Common stock transfer administrative activities	
STO 018	Stock transfer system	
STO 019	Stock transfer division expenses	
STO 020	Stock transfer division miscellaneous income	
STO 021	Stock Transfer Division-Sarbanes Oxley Related Charges	
STR	Strategic Planning	Finance employees
STR 002	Financial planning, research, analysis	
STR 005	Performance standards, measurement, analysis	
TAX	Tax	Finance employees (primarily from the Tax area)
TAX 101	Federal income tax return preparation	
TAX 102	Hawaii state income tax return preparation including franchise	
TAX 104	Other information returns preparation	
TAX 105	Federal income tax return review	
TAX 106	Hawaii state income tax return review including franchise	
TAX 108	Other information return review	
TAX 110	Tax research	
TAX 111	Tax accrual preparation and review	
TAX 112	Quarterly tax account reconciliations	
TAX 113	Federal tax audits and inquiry responses	
TAX 114	State tax audits and inquiry responses	
TAX 116	Federal income estimated tax payment	
TAX 117	Other nonpayroll federal tax payments	
TAX 118	Hawaii state income estimated tax payment	
TAX 120	Other Hawaii state and county tax payments	
TAX 121	Payroll tax payments and information reporting	
TAX 122	Executive payroll matters	
TAX 123	Sarbanes Oxley compliance	
TAX 124	Technical reading	
TAX 125	Fixed assets	
TAX 126	Tax administrative matters	
TAX 128	Tax and financial planning	
TAX 129	Tax Clearances	
TAX 130	Other tax matters	

CA-IR-32

Please provide in hard copy and electronic media a complete table of HECO and HEI Departmental and RA reporting structure documentation, showing RA descriptions and indicating how each department/RA is aligned with the HECO and HEI organization charts provided in response to the preceding two information requests.

HECO Response:

Please refer to HECO WP-101(J), pages 1507-1511, for requested HECO information. For HEI, please refer to the HEI management organization charts provided in response to CA-IR-31, pages 2 through 8. The RA and descriptions are noted on the management organizational charts.

CA-IR-33

Please provide a chart showing each separate legal entity within HEI and provide the following additional information:

- a. Explain and quantify the types of recurring and non-recurring affiliate transactions that took place in 2007 and 2008 (to date) between HECO and each affiliated entity.
- b. Describe the basis of pricing each form of affiliate transaction listed in your response to part (a) of this information request, for example fully distributed cost, market price, appraised value, etc.
- c. If any affiliate service agreements exist in connection with HECO affiliate transactions, please provide complete copies of same.
- d. Identify and describe each affiliate relationship of HECO for which Hawaii PUC notification and/or approval has been sought or received.
- e. Provide complete copies of any documents associated with your response to part (d) of this information request.

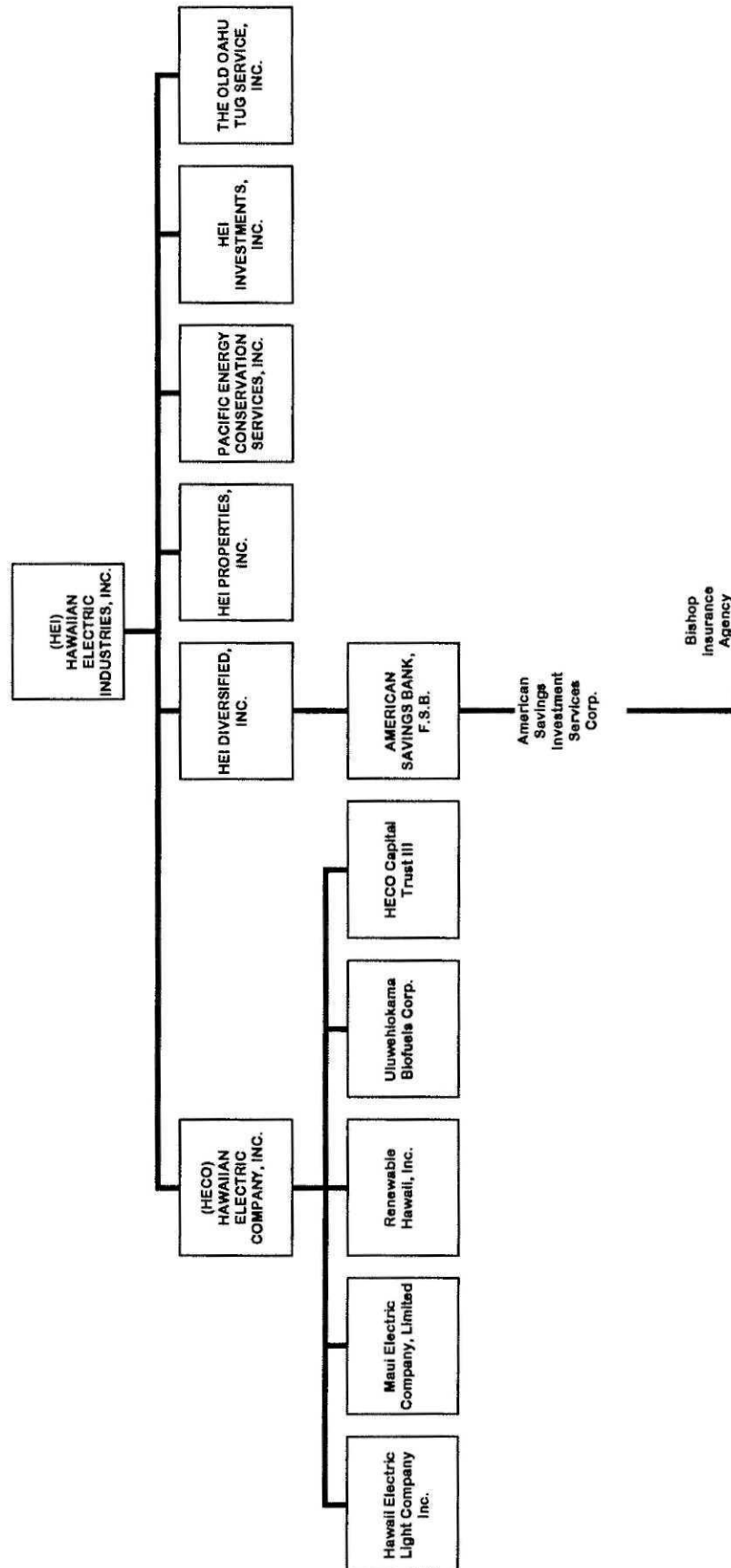
HECO Response:

Attached on page 3 of this response is a chart showing each separate legal entity within HEI.

- a. HECO services provided to affiliates in 2007 and July 2008 YTD are shown on the attached pages 4 to 15. The 2007 and July 2008 YTD information for HEI services provided to HECO is provided on pages 16 and 17 of this response.
- b. Charges from HECO to affiliates and from HEI to HECO are based on actual costs including applicable on-cost loadings. The HEI-HECO services agreement provides the basis used by HEI to allocate (when direct charging is not possible or practical) billing amounts to its various subsidiaries.
- c. Service agreements between HECO and affiliates that meet the requirements of Hawaii Revised Statutes ("HRS") Section 269-19.5 are submitted to the Commission with copies to the Division of Consumer Advocacy. Agreements filed with the Commission include:

- HEI/HECO Administrative Services Agreement dated February 4, 1993 (filed with the Commission on April 26, 1993). Addendums to the HEI/HECO Administrative Services Agreement and Updated Exhibit A to the Administrative Services Agreement were filed with the Commission and the Consumer Advocate on February 15, 2005. This agreement was included as HECO-1108.
 - Additional service agreements were provided in response to CA-IR-6 in Docket No.04-0113, HECO's 2005 test year rate case proceeding.
- d. Agreements between HECO and any affiliated interests having a face value of at least \$300,000 shall be filed with the Commission in accordance with HRS Section 269-19.5.
- e. See response to part c. above.

Corporate Organizational Structure of
HEI and HECO Holding Company Systems
as of June 30, 2008



NARUC 1861
HECO Charges Billable to associated companies
2007

CA-IR-33
DOCKET NO. 2008-0083
PAGE 4 OF 17

Sum of Amount		INTER_NARUC	Inter Naruc Desc	186200	186300	186390	186400	186410	186430	186450	186460
Activity	Act Desc	CHARGES BILL TO ASSOC COS-HELCO	CHARGES BILL TO ASSOC COS-MECO	CHARGES BILL TO ASSOC COS-HEICF	CHARGES BILL TO ASSOC COS-HEI	CHARGES BILL TO ASSOC COS-HEIII	CHARGES BILL TO ASSOC COS-TOOTTS (HTB)	CHARGES BILL TO ASSOC COS-ASB	CHARGES BILL TO ASSOC COS-PECS		
042	Financial Securities Issuance	37,134.66	83,275.81								
100	Cond Mkt Research-Reg	24,862.72	27,278.89								
110	Impl Mktg Pgm-Core	0.29									
111	Impl Mktg Pgm-Non Core	939.44									
120	Adm As Avail Contracts	9,366.96									
121	Adm Firm Cap Contracts	546.40	(15.89)		22.86						
122	Eval & Neg New Cont	205,171.96	124,872.61								
131	Rev Enhance-NonReg										
200	Dev Gen Forecasts	50,185.32	82,324.29								
201	Perf Gen Png Studies	95,877.11	76.93								
210	Plan & Approve Projects	14,409.68	88,374.01								
211	Engr Design & Mng Proj	379,638.71	289,726.56								
212	Construct Projects		329.40								
220	Mng Fuel Sup Procuremnt	3,174.39	14,705.63								
221	Adm Fuel Supp Contract	30,370.67	33,385.34								
222	Mng Fuel & Dist Svcs		1,620.41								
230	Mng O&M Fuel Fac		1,661.82								
231	Mng Fuel Del & Inv Png	10,724.16	12,373.40								
240	Dev & Maint Pol & Proc	5,499.66	14,116.52								
241	Op & Mon Fuel Feed Sys		127,422.75								
257	Maint Boiler Plt Eq-Prev	1,190.84	809.50								
258	Maint Boiler Plt Eq-Pred	292.01									
261	Maint Strm Turbo Eq-Pred	18,585.77									
300	Perf Trans Png Studies	327,072.54	52,768.93								
302	E&D Trans Fac-OH Ln	85,173.88	24,709.06								
304	E&D Trans Fac-Sub Eq	40,814.24	5,440.30								
307	Mng Trans Projects	2,729.12									
348	Maint Sub Trans Eq-Prev		66,842.71								
349	Maint Sub Trans Eq-Pred	27,577.88	30,232.70								
350	Maint Sub Trans Eq-Corr	3,078.41									
400	Perf Dist Png Studies	7,473.57									
402	Dev & Maint DistStdSpecs	18,796.28	5,373.15								
492	Maint Dist Tools & Eq	45,885.13	26,582.54								
507	Emerg Dist OH Ln-Storm	372.66									
600	Resp to Cus Inq/Svc Req	523,091.10	458,202.75		16,511.39						
601	Perf Meter Svc Work		2,028.70								
604	Maint Cus Account Info	32,367.26	32,148.70								
610	Read Billing Meters	15,690.13	24,637.80								
611	Mg Billing & Acct Prob	2,251.92	394.40								
614	Process Cust Bills	329,890.99	260,690.29		21,777.52						
616	Process Cust Payments	47,968.69	47,491.71								
700	Dev & Adm Business Plans	28,038.31	27,560.53		64,446.11						
701	Dev & Mg Forecasts	39,423.27	36,692.23		199.10						
710	Dev & Mg Fcst-Sales/Load	52,594.59	43,355.02								

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Sum of Amount		INTER NARUC	Inter Naruc Desc	186200	186300	186390	186400	186410	186430	186450	186460
Activity	Act desc	CHARGES BILL TO ASSOC COS- HELCO	CHARGES BILL TO ASSOC COS- MECO	CHARGES BILL TO ASSOC COS- HEICF	CHARGES BILL TO ASSOC COS- HEI	CHARGES BILL TO ASSOC COS- HEIII	CHARGES BILL TO ASSOC COS- TOOTS (HTB)	CHARGES BILL TO ASSOC COS- ASB	CHARGES BILL TO ASSOC COS- PECS		
711	Adm & Impl IRP Pgm-Base	248,365.71	1,428.18								
712	Adm & Impl IRP Pgm-Incr	199.85	282,726.08								
713	Adm & Impl DSM Pgm-Base	398.78									
714	Adm & Impl DSM Pgm-Incr	136,349.05	138,864.74								
721	Dev Meas & Anlz Perf	3,702.06	3,280.48								
722	Org Dev Strat	241.41									
723	Mg Incent & Recog Pgm	435.74	5,814.04								
730	Rsrch New Technology	269,201.89	237,409.61								
735	Rate Case Filings	77,960.60	120,113.32								
736	Pricing Anlys&Proposals	44,703.84	44,254.18								
737	Cost Recov & Rate Adj	4,013.58	7,529.58								
738	Othr PUC Reg Filings	28,096.39	31,756.66								
739	PUC Cap Proj Filings	2,112.36	2,738.34								
745	Maint Rel-Leg & Govt Ag	16,842.33	13,976.02								
747	Mg Environ Initiatives		1,153.87								
749	Maint Rel-Ind Assoc	65,824.76	66,250.15		333.11			1,031.81			
750	Maint Rel- Cust	36,591.34	31,299.17								
751	Adm Informational Ad	3,708.34	1,682.32								
752	Maint Rel-Media	4,672.91	1,575.36								
753	Maint Rel-Community				485.09						
755	Maint Rel-BOD	8,467.46	7,297.80		55,092.06			1,717.59			
756	Maint Rel-Invest				49,798.32						
760	Audits-Internal	21,985.91	20,020.28								
761	Audits-External	563.71	756.91		523.70			168.66		156.52	
765	Empl Pol Prac Proc	15,017.21	11,465.55								
766	Maint Employee Recds	2,942.05	2,605.30		790.69						
767	Recruit PolPracProc	11.00	60.72		7,643.79					141.52	
775	Empl Comp PolPracProc	13,883.01	13,886.32		20,817.11						
776	Ben Plan PolPracProc	7,563.87	7,362.93		7,235.37			647.57		1,804.04	
777	Process Payroll	42,412.22	4,696.39		4,246.67					1,358.49	
778	Adm Flexible Ben Pgm	49,299.17	45,663.77		13,921.10					802.40	
779	Adm Retirement Pgm	27,427.63	26,635.53		33,064.38			13,469.36		3,484.98	
780	AdmBen Oth than Flex Ret	67,131.95	96,392.75		105,799.88					995.94	
787	Dev Empl Training		1,261.26								
788	Conduct Empl Training	12,465.03	14,892.31								
789	Attend Training	821.12	564.90		6.32			331.49			
795	Mg Safety Pgm & Trng	876.90	829.50								
805	Mg BU & Oth Lbr Agmnt	3,349.79	966.26								
807	Co-wide Empl Commun	3,388.40	4,725.43		3,360.86						
815	Dev Adm Acctg Pol Proc	13,856.86	12,041.63								
817	Maint Fixed Asset Rds	13,984.15	13,866.07								
818	Maint G/L & Stat Info	19,065.80	6,719.35		234.97			601.08		60.68	
819	Adm Tax Return & Reports	3,651.11	700.00								
825	Manage Cash	100,217.28	55,866.05		111,043.84	1,295.68			1,163.93		441.34
826	Manage Financing	78,805.12	70,363.15		44,061.26						

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Sum of Amount		INTER_NARUC Inter Naruc Desc									
		186200	186300	186390	186400	186410	186430	186450	186460		
Activity	Act desc	CHARGES BILL TO ASSOC COS-HELCO	CHARGES BILL TO ASSOC COS-MECO	CHARGES BILL TO ASSOC COS-HEICF	CHARGES BILL TO ASSOC COS-HEI	CHARGES BILL TO ASSOC COS-HEIII	CHARGES BILL TO ASSOC COS-TOOTS (HTB)	CHARGES BILL TO ASSOC COS-ASB	CHARGES BILL TO ASSOC COS-PECS		
827	Perf Econ/Fin Anlys	506.81									
835	Fin Rpts/StalInfo-Int	7,312.55	3,977.25								
836	Fin Rpts/StalInfo-Ext	140,970.09	109,466.98		861.31						
842	Order Mat Eq Sup & Svcs	30,075.14	28,062.75								
843	Proc Invoices Oth Pmt	145,625.90	155,468.83								
844	Prep Contr-Svcs & Mat	17,148.52	11,309.18		1,381.26						
865	Apply Envir Permits-Air	9,043.73	19,919.59								
866	Apply Envir Permits-Wtr	3,467.14	2,655.37								
875	Comply Ongo Perm-Air	82,620.08	144,247.87								
876	Comply Ongo-Wstewtr	176,974.26	44,830.92								
877	Comply Sid&HazWste OilRel	116,387.95	121,697.34								
878	Comply Sid&HazWste NonOil	18,491.33	5,513.94								
879	Comply Ongoing-Noise	69.17	32.26								
891	Maint Exist Comp App	213,519.94	208,978.86								
895	Op & Maint Mainframe	283,139.33	283,139.33		3,352.08						
896	Op & Maint LAN	17,481.19	13,855.72		370.81						
897	Op & Maint Desktop-Bus	106,000.43	72,605.92		3,128.77						
900	Op Desktop OffcTelecom	325.85			35,319.98						
901	Prov IT Cust Assist		2,690.40								
915	Trouble/Rep Sys-Telecom		11,712.81								
926	Manage Property		25.19								
927	Sell/Dispose Prop		876.39		8,328.13						
928	Process Easements	1,564.21	1,984.27								
930	Mg Const & Reconfig Fac				16,313.69						
931	Care for Bldgs & Grnds				3,976.47						
932	Repair Bldgs & Grnds	27,191.26									
933	Prov&Mg Svcs-Security				1,452.03						
934	Prov&Mg Svcs-Custodial				521.06						
940	Mg/Adm Veh Pgm Pol&Proc	27,834.64	12,058.47								
942	Maint Vehicles	1,893.42	5,728.91								
950	Prov Risk Mgt Svcs-Liab	395,755.33	404,653.53								
951	Prov Risk Mgt Svcs-Prop	527,462.49	880,363.02								
952	Prov Risk Mgt Svcs-Marine	75,618.94									
953	Prov Risk Mgt Svcs-WC	74,519.15	70,465.88		1,178.05						
960	Mg Svc & Process Doc	9,830.68	12,613.32	184.65							
961	Cond Legal Due Diligence	1,528.15									
965	Prov Records Mgt Svcs		1,008.04								
966	Handle & Deliver Mail				505.68						
967	Prov Printing Svcs		187.62		481.98						
Grand Total		6,481,226.09	6,089,111.72	184.65	1,588,435.90	1,594.71	672.41	37,423.94	17,062.45		

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Sum of Amount		186470	186480	186484	186486	186487	Grand Total
Activity	Act desc	CHARGES BILL TO ASSOC COS- HEIPC	CHARGES BILL TO ASSOC COS- HEIDI	CHARGES BILL TO HEI PROPERTIES INC.	Charges Billable- Renewable Hawaii, Inc.	Charges Billable- Uluwehi Biofuels	
042	Financial Securities Issuance						120,410.47
100	Cond Mkt Research-Reg						52,141.61
110	Impl Mktg Pgm-Core						0.29
111	Impl Mktg Pgm-Non Core						939.44
120	Adm As Avail Contracts						9,366.96
121	Adm Firm Cap Contracts						553.37
122	Eval & Neg New Cont						330,044.57
131	Rev Enhance-NonReg				55,029.67		55,029.67
200	Dev Gen Forecasts						132,509.61
201	Perf Gen Png Studies						95,954.04
210	Plan & Approve Projects						102,783.69
211	Engr Design & Mng Proj						669,365.27
212	Construct Projects						329.40
220	Mng Fuel Sup Procuremnt						17,880.02
221	Adm Fuel Supp Contract						63,756.01
222	Mng Fuel & Dist Svcs						1,620.41
230	Mng O&M Fuel Fac						1,661.82
231	Mng Fuel Del & Inv Png						23,097.56
240	Dev & Maint Pol & Proc						19,616.18
241	Op & Mon Fuel Feed Sys						127,422.75
257	Maint Boiler Plt Eq-Prev						2,000.34
258	Maint Boiler Plt Eq-Prev						292.01
261	Maint Strm Turbo Eq-Pred						18,585.77
300	Perf Trans Png Studies						379,841.47
302	E&D Trans Fac-OH Ln						109,882.94
304	E&D Trans Fac-Sub Eq						46,254.54
307	Mng Trans Projects						2,729.12
348	Maint Sub Trans Eq-Prev						66,842.71
349	Maint Sub Trans Eq-Pred						57,810.58
350	Maint Sub Trans Eq-Corr						3,078.41
400	Perf Dist Png Studies						7,473.57
402	Dev & Maint DistStdSpecs						24,169.43
492	Maint Dist Tools & Eq						72,467.67
507	Emerg Dist OH Ln-Storm						372.66
600	Resp to Cus Inq/Svc Req						997,805.24
601	Perf Meter Svc Work						2,028.70
604	Maint Cus Account Info						64,515.96
610	Read Billing Meters						40,327.93
611	Mg Billing & Acct Prob						2,646.32
614	Process Cust Bills						612,358.80
616	Process Cust Payments						95,460.40
700	Dev & Adm Business Plans						120,044.95
701	Dev & Mg Forecasts						76,314.60
710	Dev & Mg Fcst-Sales/Load						95,949.61

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Sum of Amount		186470	186480	186484	186486	186487	Grand Total
Activity	Act desc	CHARGES BILL TO ASSOC COS- HEIPC	CHARGES BILL TO ASSOC COS- HEIDI	CHARGES BILL TO HEI PROPERTIES INC.	Charges Billable- Renewable Hawaii, Inc.	Charges Billable- Uluwehi Biofuels	
711	Adm & Impl IRP Pgm-Base						249,793.89
712	Adm & Impl IRP Pgm-Incr						282,925.93
713	Adm & Impl DSM Pgm-Base						398.78
714	Adm & Impl DSM Pgm-Incr						275,213.79
721	Dev Meas & Anlz Perf						6,982.54
722	Org Dev Strat						241.41
723	Mg Incent & Recog Pgm						6,249.78
730	Rsrch New Technology			78.78			506,690.28
735	Rate Case Filings						198,073.92
736	Pricing Anlys&Proposals						88,958.02
737	Cost Recov & Rate Adj						11,543.16
738	Othr PUC Reg Filings						59,853.05
739	PUC Cap Proj Filings						4,850.70
745	Maint Rel-Leg & Govt Ag						30,818.35
747	Mg Environ Initiatives					24,657.60	25,811.47
749	Maint Rel-Ind Assoc						133,439.83
750	Maint Rel- Cust						67,890.51
751	Adm Informational Ad						5,390.66
752	Maint Rel-Media						6,248.27
753	Maint Rel-Community						485.09
755	Maint Rel-BOD	(434.73)					72,140.18
756	Maint Rel-Invest						49,798.32
760	Audits-Internal						42,006.19
761	Audits-External						2,169.50
765	Empl Pol Prac Proc						26,482.76
766	Maint Employee Recds						6,338.04
767	Recruit PolPracProc						7,857.03
775	Empl Comp PolPracProc						48,586.44
776	Ben Plan PolPracProc						24,613.78
777	Process Payroll						52,713.77
778	Adm Flexible Ben Pgm						109,686.44
779	Adm Retirement Pgm						104,081.88
780	AdmBen Oth than Flex Ret						270,320.52
787	Dev Empl Training						1,261.26
788	Conduct Empl Training						27,357.34
789	Attend Training						1,723.83
795	Mg Safety Pgm & Trng						1,706.40
805	Mg BU & Oth Lbr Agmnt						4,316.05
807	Co-wide Empl Commun						11,474.69
815	Dev Adm Accig Pol Proc						25,898.49
817	Maint Fixed Asset Rcds						27,850.22
818	Maint G/L & Stat Info				15,813.21		42,495.09
819	Adm Tax Return & Reports						4,351.11
825	Manage Cash		655.64	707.00			271,491.69
826	Manage Financing					43.88	193,273.41

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Sum of Amount		186470	186480	186484	186486	186487	Grand Total
Activity	Act desc	CHARGES BILL TO ASSOC COS- HEIPC	CHARGES BILL TO ASSOC COS- HEIDI	CHARGES BILL TO HEI PROPERTIES INC.	Charges Billable- Renewable Hawaii, Inc.	Charges Billable- Uluwehi Biofuels	
827	Perf Econ/Fin Anlys						506.81
835	Fin Rpts/StatInfo-Int						11,289.80
836	Fin Rpts/StatInfo-Ext						251,298.38
842	Order Mat Eq Sup & Svcs						58,137.89
843	Proc Invoices Oth Pmt						301,094.73
844	Prep Contr-Svcs & Mat						29,838.96
865	Apply Envir Permits-Air						28,963.32
866	Apply Envir Permits-Wtr						6,122.51
875	Comply Ongo Perm-Air						226,867.95
876	Comply Ongo-Wstewtr						221,805.18
877	Comply Sid&HazWste OilRel						238,085.29
878	Comply Sid&HazWste NonOil						24,005.27
879	Comply Ongoing-Noise						101.43
891	Maint Exist Comp App						422,498.80
895	Op & Maint Mainframe						569,630.74
896	Op & Maint LAN						31,707.72
897	Op & Maint Desktop-Bus						181,735.12
900	Op Desktop OffcTelecom						35,645.83
901	Prov IT Cust Assist						2,690.40
915	Trouble/Rep Sys-Telecom						11,712.81
926	Manage Property						25.19
927	Sell/Dispose Prop						9,204.52
928	Process Easements						3,548.48
930	Mg Const & Reconfig Fac						16,313.69
931	Care for Bldgs & Grnds						3,976.47
932	Repair Bldgs & Grnds						27,191.26
933	Prov&Mg Svcs-Security						1,452.03
934	Prov&Mg Svcs-Custodial						521.06
940	Mg/Adm Veh Pgm Pol&Proc						39,893.11
942	Maint Vehicles						7,622.33
950	Prov Risk Mgt Svcs-Liab				209.75		1,763,080.61
951	Prov Risk Mgt Svcs-Prop						1,415,908.11
952	Prov Risk Mgt Svcs-Marine						75,618.94
953	Prov Risk Mgt Svcs-WC						152,538.01
960	Mg Svc & Process Doc						22,628.65
961	Cond Legal Due Diligence						1,528.15
965	Prov Records Mgt Svcs						1,008.04
966	Handle & Deliver Mail						505.68
967	Prov Printing Svcs						669.60
Grand Total		(434.73)	655.64	785.78	71,197.44	24,657.60	14,312,563.60

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Sum of Amount		INTER_NARUC	Inter Nartuc Desc	186200	186300	186400	186410	186430	186450	186460	186470
Activity	Act desc	CHARGES BILL TO ASSOC COS HELCO	CHARGES BILL TO ASSOC COS-MECO	CHARGES BILL TO ASSOC COS-HEI	CHARGES BILL TO ASSOC COS-HEIII	CHARGES BILL TO ASSOC TOOTS (HTB)	CHARGES BILL TO ASSOC COS-ASB	CHARGES BILL TO ASSOC COS-PECS	CHARGES BILL TO ASSOC COS-HEIPC		
		186200	186300	186400	186410	186430	186450	186460	186470		
100	Cond Mkt Research-Reg	14,180.73	14,821.38								
120	Adm As Avail Contracts	15,225.37									
122	Eval & Neg New Cont	58,017.98	157,577.65								
131	Rev Enhance-NonReg										
200	Dev Gen Forecasts	79,302.16	54,967.61								
201	Perf Gen Png Studies	46,822.32									
210	Plan & Approve Projects	67.24	228,699.96								
211	Engr Design & Mng Proj	294,256.40	139,086.28								
220	Mng Fuel Sup Procurement	2,161.86	17,126.20								
221	Adm Fuel Supp Contract	34,971.21	39,522.56								
231	Mng Fuel Del & Inv Png	10,092.36	10,565.01								
241	Op & Mon Fuel Feed Sys		76,553.42								
257	Maint Boiler Ptt Eq-Prev	18.00	10.00								
258	Maint Boiler Ptt Eq-Pred	(289.21)									
261	Maint Strm Turbo Eq-Pred	3,100.65									
300	Perf Trans Png Studies	77,201.57	47,488.18								
302	E&D Trans Fac-OH Ln	17,748.84	1,281.91								
304	E&D Trans Fac-Sub Eq		3,886.06								
348	Maint Sub Trans Eq-Prev		73,989.08								
349	Maint Sub Trans Eq-Pred	16,669.84	28,573.40								
402	Dev & Maint DistStdSpecs	3,595.92	2,497.34								
492	Maint Dist Tools & Eq	32,932.94	5,839.67								
600	Resp to Cus Inq/Svc Req	222,837.43	195,646.84	2,767.60							
601	Perf Meter Svc Work		(2,028.70)								
604	Maint Cus Account Info	12,832.64	12,832.64								
610	Read Billing Meters	13,002.65	21,184.71								
611	Mg Billing & Acct Prob	100.84	714.66								
614	Process Cust Bills	209,539.26	163,179.62	12,182.26							
616	Process Cust Payments	30,290.84	30,370.01								
700	Dev & Adm Business Plans	17,234.56	23,726.27	23,164.41							
701	Dev & Mg Forecasts	210.46									
710	Dev & Mg Fcst-Sales/Load	26,446.73	37,983.24								
711	Adm & Impl IRP Pgm-Base	90,580.90	188,732.73								
712	Adm & Impl IRP Pgm-Incr		(2,914.97)								
713	Adm & Impl DSM Pgm-Base	294.92									
714	Adm & Impl DSM Pgm-Incr	47,322.73	49,033.42								
721	Dev Meas & Anlz Perf	3,258.04	3,306.87								
723	Mg Incent & Recog Pgm	294.65	163.63								
730	Rsrch New Technology	195,503.03	184,088.27								
735	Rate Case Filings		4,331.84								
736	Pricing Anlys&Proposals	1,719.80	16,980.14								
737	Cost Recov & Rate Adj	12,078.25	15,031.47								
738	Other PUC Reg Filings	29,825.20	24,215.84								
739	PUC Cap Proj Filings	40,105.09	57,040.23								

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Sum of Amount		INTER_NARUC	Inter Natruc Desc	186200	186300	186400	186410	186430	186450	186460	186470
Activity	Act desc	CHARGES BILL TO ASSOC COS HELCO	CHARGES BILL TO ASSOC COS-MECO	CHARGES BILL TO ASSOC COS-HEI	CHARGES BILL TO ASSOC COS-HEIII	CHARGES BILL TO ASSOC COS-TOOTS (HTB)	CHARGES BILL TO ASSOC COS-ASB	CHARGES BILL TO ASSOC COS-PECS	CHARGES BILL TO ASSOC COS-HEIPC		
745	Maint Rel-Leg & Govt Ag	11,205.01	10,178.56								
747	Mg Environ Initiatives		707.33								
749	Maint Rel-Ind Assoc	35,875.19	35,318.12	193.96			323.24				
750	Maint Rel- Cust	18,346.92	16,560.30	18.00							
751	Adm Informational Ad	1,031.67	890.99								
752	Maint Rel-Media	388.90	164.30								
755	Maint Rel-BOD	3,185.92	5,283.81	14,582.81			538.31				
756	Maint Rel-Invest			28,943.95							
760	Audits-Internal	71,509.23	2,768.22								
761	Audits-External	314.88	265.58	410.17			349.36	115.49			
765	Empl Pol Prac Proc	3,384.71	11,677.69								
766	Maint Employee Recds	1,163.50	1,106.84	504.69							
767	Recruit PolPracProc			401.64							
775	Empl Comp PolPracProc	7,926.10	7,359.01	3,700.28							
776	Ben Plan PolPracProc	2,883.06	2,528.18	2,365.27			181.47	1,345.14			
777	Process Payroll	4,509.87	3,292.48	3,348.82				927.91	0.85		
778	Adm Flexible Ben Pgm	322,246.03	349,004.52	64,202.49			8,261.50	363.33			
779	Adm Retirement Pgm	17,832.22	13,278.95	21,714.73				2,078.32			
780	AdmBen Oth than Flex Ret	(651.23)	5,394.05	42,850.74				187.11			
788	Conduct Empl Training	9,084.32	12,077.43								
789	Attend Training	529.47	584.39	80.78			429.23				
795	Mg Safety Pgm & Trng	223.44									
805	Mg BU & Oth Lbr Agrmnt	10,318.89	100.19								
807	Co-wide Empl Commun	3,826.64	3,978.57								
815	Dev Adm Acctg Pol Proc	5,946.64	6,384.32								
817	Maint Fixed Asset Rcds	11,896.86	12,307.17								
818	Maint G/L & Stat Info	4,593.07	4,627.06								
819	Adm Tax Return & Reports	3,168.39									
825	Manage Cash	116,367.76	26,827.91	83,127.38	232.86	218.21		102.34			
826	Manage Financing	42,745.95	40,743.26	32,083.32							
835	Fin Rpts/StatInfo-Int	2,525.60	2,716.21								
836	Fin Rpts/StatInfo-Ext	107,263.72	76,794.99	319.48							
842	Order Mat Eq Sup & Svcs	21,191.16	17,694.74								
843	Proc Invoices Oth Pmt	100,387.41	96,004.85								
844	Prep Contr-Svcs & Mat	12,387.80	1,750.53	70.78							
865	Apply Envir Permits-Air	7,374.28	23,704.89								
866	Apply Envir Permits-Wtr	1,977.21	7,245.88								
875	Comply Ongo Perm-Air	43,144.30	54,481.90								
876	Comply Ongo-Wstewtr	106,440.22	23,423.23								
877	Comply Sid&HazWste OilRel	61,755.47	60,872.26	(0.02)							
878	Comply Sid&HazWste NonOil	17,811.74	8,281.49								
879	Comply Ongoing-Noise	25.73									
891	Maint Exist Comp App	131,744.88	128,482.02								
895	Op & Maint Mainframe	175,306.52	170,050.19	1,335.00							
896	Op & Maint LAN			143.62							

NARUC 1861
HECO Charges Billable to associated companies
2008 JUL YTD

Sum of Amount		INTER_NARUC	Inter Naruc Desc	186200	186300	186400	186410	186430	186450	186460	186470
Activity	Act desc	CHARGES BILL TO ASSOC COS HELCO	CHARGES BILL TO ASSOC COS-MECO	CHARGES BILL TO ASSOC COS-HEI	CHARGES BILL TO ASSOC COS-HEIII	CHARGES BILL TO ASSOC COS-TOOTS (HTB)	CHARGES BILL TO ASSOC COS-ASB	CHARGES BILL TO ASSOC COS-PECS	CHARGES BILL TO ASSOC COS-HEIPC		
897	Op & Maint Desktop-Bus	82,562.94	70,392.89	17,100.00							
900	Op Desktop OffcTelecom										
926	Manage Property		319.97								
927	Sell/Dispose Prop		291.41								
928	Process Easements	241.46	(661.25)								
931	Care for Bldgs & Grnds			1,015.25							
932	Repair Bldgs & Grnds	26,288.50									
934	Prov&Mg Svcs-Custodial			196.39							
940	Mg/Adm Veh Pgm Pol&Proc	18,034.28	9,359.89								
942	Maint Vehicles	1,248.78	757.36								
950	Prov Risk Mgt Svcs-Liab	382,882.70	393,845.07	844,455.10	(3.83)		6,086.58	2,136.92			
951	Prov Risk Mgt Svcs-Prop	17,722.94	90,966.02	2,226.78			(999.01)	(1.64)			
952	Prov Risk Mgt Svcs-Marine	19,869.78	231.76								
953	Prov Risk Mgt Svcs-WC	57,549.67	53,934.33	799.65			336.64	31.00			
960	Mg Svc & Process Doc	3,932.97	14,018.96								
961	Cond Legal Due Diligence		2,685.04								
967	Prov Printing Svcs		182.68	3,345.93							
112	Dev & Mng Cust Rel	1,156.56									
720	Improve Bus Processes	347.99	347.99								
907	Mg E&D Sys-Telecom		3,001.43								
968	Prov Word Process Svcs			121.02							
Grand Total		3,770,582.22	3,810,690.43	1,207,772.28	229.03	218.21	15,507.32	7,285.92		0.85	

NARUC 1861
HECO Charges Billable to associated companies
2008 JUL YTD

Sum of Amount		186480	186484	186486	186487	Grand Total
Activity	Act desc	CHARGES BILL TO ASSOC COS-HEIDI	CHARGES BILL TO HEI PROPERTIES INC.	Charges Billable- Renewable Hawaii, Inc.	Charges Billable Uluwehi Biofuels	
100	Cond Mkt Research-Reg					29,002.11
120	Adm As Avail Contracts					15,225.37
122	Eval & Neg New Cont					215,595.63
131	Rev Enhance-NonReg			31,395.42		31,395.42
200	Dev Gen Forecasts					134,269.77
201	Perf Gen Png Studies					46,822.32
210	Plan & Approve Projects					228,767.20
211	Engr Design & Mng Proj					433,342.68
220	Mng Fuel Sup Procuremnt					19,288.06
221	Adm Fuel Supp Contract					74,493.77
231	Mng Fuel Del & Inv Png					20,657.37
241	Op & Mon Fuel Feed Sys					76,553.42
257	Maint Boiler Plt Eq-Prev					28.00
258	Maint Boiler Plt Eq-Pred					(289.21)
261	Maint Stm Turbo Eq-Pred					3,100.65
300	Perf Trans Png Studies					124,689.75
302	E&D Trans Fac-OH Ln					19,030.75
304	E&D Trans Fac-Sub Eq					3,886.06
348	Maint Sub Trans Eq-Prev					73,989.08
349	Maint Sub Trans Eq-Pred					45,243.24
402	Dev & Maint DistStdSpecs					6,093.26
492	Maint Dist Tools & Eq					38,772.61
600	Resp to Cus Inq/Svc Req					421,251.87
601	Perf Meter Svc Work					(2,028.70)
604	Maint Cus Account Info					25,665.28
610	Read Billing Meters					34,187.36
611	Mg Billing & Acct Prob					815.50
614	Process Cust Bills					384,901.14
616	Process Cust Payments					60,660.85
700	Dev & Adm Business Plans					64,125.24
701	Dev & Mg Forecasts					210.46
710	Dev & Mg Fcst-Sales/Load					64,429.97
711	Adm & Impl IRP Pgm-Base					279,313.63
712	Adm & Impl IRP Pgm-Incr					(2,914.97)
713	Adm & Impl DSM Pgm-Base					294.92
714	Adm & Impl DSM Pgm-Incr					96,356.15
721	Dev Meas & Anlz Perf					6,564.91
723	Mg Incent & Recog Pgm					458.28
730	Rsrch New Technology					379,591.30
735	Rate Case Filings					4,331.84
736	Pricing Anlys&Proposals					18,699.94
737	Cost Recov & Rate Adj					27,109.72
738	Othr PUC Reg Filings					54,041.04
739	PUC Cap Proj Filings					97,145.32

NARUC 1861
HECO Charges Billable to associated companies
2008 JUL YTD

Sum of Amount		186480	186484	186486	186487	Grand Total
Activity	Act desc	CHARGES BILL TO ASSOC COS-HEIDI	CHARGES BILL TO HEI PROPERTIES INC.	Charges Billable Renewable Hawaii, Inc.	Charges Billable Uluwehi Biofuels	
745	Maint Rel-Leg & Govt Ag					21,383.57
747	Mg Environ Initiatives				44,445.46	45,152.79
749	Maint Rel-Ind Assoc					71,710.51
750	Maint Rel- Cust					34,925.22
751	Adm Informational Ad					1,922.66
752	Maint Rel-Media					553.20
755	Maint Rel-BOD					23,590.85
756	Maint Rel-Invest					28,943.95
760	Audits-Internal					74,277.45
761	Audits-External					1,455.48
765	Empl Pol Prac Proc					15,062.40
766	Maint Employee Recds					2,775.03
767	Recruit PolPracProc					401.64
775	Empl Comp PolPracProc					18,985.39
776	Ben Plan PolPracProc					9,303.12
777	Process Payroll					12,079.93
778	Adm Flexible Ben Pgm					735,616.37
779	Adm Retirement Pgm					63,165.72
780	AdmBen Oth than Flex Ret					47,780.67
788	Conduct Empl Training					21,161.75
789	Attend Training					1,623.87
795	Mg Safety Pgm & Trng					223.44
805	Mg BU & Oth Lbr Agmnt					10,419.08
807	Co-wide Empl Commun					7,805.21
815	Dev Adm Acctg Pol Proc					12,330.96
817	Maint Fixed Asset Rods					24,204.03
818	Maint G/L & Stat Info			8,690.24		17,910.37
819	Adm Tax Return & Reports					3,168.39
825	Manage Cash	245.10	188.96	299.81		227,610.33
826	Manage Financing			34.86		115,607.39
835	Fin Rpts/StatInfo-Int					5,241.81
836	Fin Rpts/StatInfo-Ext					184,378.19
842	Order Mat Eq Sup & Svcs					38,885.90
843	Proc Invoices Oth Pmt					196,392.26
844	Prep Contr-Svcs & Mat					14,209.11
865	Apply Envir Permits-Air					31,079.17
866	Apply Envir Permits-Wtr					9,223.09
875	Comply Ongo Perm-Air					97,626.20
876	Comply Ongo-Wstewtr					129,863.45
877	Comply Sld&HazWste OilRel					122,627.71
878	Comply Sld&HazWste NonOil					26,093.23
879	Comply Ongoing-Noise					25.73
891	Maint Exist Comp App					260,226.90
895	Op & Maint Mainframe					346,691.71
896	Op & Maint LAN					143.62

NARUC 1861
HECO Charges Billable to associated companies
2008 JUL YTD

Sum of Amount		186480	186484	186486	186487	Grand Total
Activity	Act desc	CHARGES BILL TO ASSOC COS-HEIDI	CHARGES BILL TO HEI PROPERTIES INC.	Charges Billable Renewable Hawaii, Inc.	Charges Billable Uluwehi Biofuels	
897	Op & Maint Desktop-Bus					152,955.83
900	Op Desktop OffcTelecom					17,100.00
926	Manage Property					319.97
927	Sell/Dispose Prop					291.41
928	Process Easements					(419.79)
931	Care for Bldgs & Grnds					1,015.25
932	Repair Bldgs & Grnds					26,288.50
934	Prov&Mg Svcs-Custodial					196.39
940	Mg/Admin Veh Pgm Pol&Proc					27,394.17
942	Maint Vehicles					2,006.14
950	Prov Risk Mgt Svcs-Liab			238.25		1,629,640.79
951	Prov Risk Mgt Svcs-Prop					109,915.09
952	Prov Risk Mgt Svcs-Marine					20,101.54
953	Prov Risk Mgt Svcs-WC					112,651.29
960	Mg Svc & Process Doc					17,951.93
961	Cond Legal Due Diligence					2,685.04
967	Prov Printing Svcs					3,528.61
112	Dev & Mng Cust Rel					1,156.56
720	Improve Bus Processes					695.98
907	Mg E&D Sys-Telecom					3,001.43
968	Prov Word Process Svcs					121.02
Grand Total		245.10	188.96	40,658.58	44,445.46	8,897,824.36

Intercompany charges
2007

DSTRCT CODE	CCY	IND	NARUC	NARUC desc	Activity	RA	EE	Act desc	Amount
HECO	2007		184	CLEARING ACCOUNTS	895	PEI	550	Op & Maint Mainframe	60,926.43
HECO	2007		921	ADMIN & GENL EXP - NLABR	700	P9P	550	Dev & Adm Business Plans	210,771.84
HECO	2007		921	ADMIN & GENL EXP - NLABR	723	P9P	550	Mg Incent & Recog Pgm	181,170.83
HECO	2007		921	ADMIN & GENL EXP - NLABR	735	P9P	550	Rate Case Filings	150,865.90
HECO	2007		921	ADMIN & GENL EXP - NLABR	756	P9P	550	Maint Rel-Invest	600,253.25
HECO	2007		921	ADMIN & GENL EXP - NLABR	760	P9P	550	Audits-Internal	19,405.37
HECO	2007		921	ADMIN & GENL EXP - NLABR	761	P9P	550	Audits-External	1,021.83
HECO	2007		921	ADMIN & GENL EXP - NLABR	775	P9P	550	Empl Comp PolPracProc	164,967.09
HECO	2007		921	ADMIN & GENL EXP - NLABR	815	P9P	550	Dev Adm Acctg Pol Proc	14,389.25
HECO	2007		921	ADMIN & GENL EXP - NLABR	819	P9P	550	Adm Tax Return & Reports	188,248.80
HECO	2007		921	ADMIN & GENL EXP - NLABR	826	P9P	550	Manage Financing	2,981.18
HECO	2007		921	ADMIN & GENL EXP - NLABR	836	P9P	550	Fin Rpts/StatInfo-Ext	586,702.41
HECO	2007		926	EMPLOYEE PENSIONS & BENEFITS	776	P9P	550	Ben Plan PolPracProc	729.19
HECO	2007		926	EMPLOYEE PENSIONS & BENEFITS	779	P9P	550	Adm Retirement Pgm	227,685.67
HECO	2007		9302	MISCELLANEOUS GENERAL EXPENSES	755	P9P	550	Maint Rel-BOD	64,202.95
									2,474,321.99

Intercompany charges
2008 JUL YTD

DSTRCT CODE	CCYY	IND	NARUC	NARUC desc.	Activity	RA	EE	Act desc	Amount
HECO	2008		184	CLEARING ACCOUNTS	895	PEI	550	Op & Maint Mainframe	25,430.29
HECO	2008		921	ADMIN & GENL EXP - NLABR	700	P9P	550	Dev & Adm Business Plans	166,905.27
HECO	2008		921	ADMIN & GENL EXP - NLABR	723	P9P	550	Mg Incent & Recog Pgm	74,429.65
HECO	2008		921	ADMIN & GENL EXP - NLABR	735	P9P	550	Rate Case Filings	25,958.22
HECO	2008		921	ADMIN & GENL EXP - NLABR	756	P9P	550	Maint Rel-Invest	377,669.86
HECO	2008		921	ADMIN & GENL EXP - NLABR	760	P9P	550	Audits-Internal	138,914.23
HECO	2008		921	ADMIN & GENL EXP - NLABR	775	P9P	550	Empl Comp PolPracProc	154,914.70
HECO	2008		921	ADMIN & GENL EXP - NLABR	815	P9P	550	Dev Adm Acctg Pol Proc	14,746.91
HECO	2008		921	ADMIN & GENL EXP - NLABR	819	P9P	550	Adm Tax Return & Reports	100,148.21
HECO	2008		921	ADMIN & GENL EXP - NLABR	826	P9P	550	Manage Financing	1,248.65
HECO	2008		921	ADMIN & GENL EXP - NLABR	836	P9P	550	Fin Rpts/StatInfo-Ext	749,372.35
HECO	2008		921	ADMIN & GENL EXP - NLABR	961	P9P	550	Cond Legal Due Diligence	15,991.64
HECO	2008		926	EMPLOYEE PENSIONS & BENEFITS	776	P9P	550	Ben Plan PolPracProc	1,503.60
HECO	2008		926	EMPLOYEE PENSIONS & BENEFITS	779	P9P	550	Adm Retirement Pgm	110,208.47
HECO	2008		9302	MISCELLANEOUS GENERAL EXPENSES	755	P9P	550	Maint Rel-BOD	90,622.44
									2,048,064.49

CA-IR-34

Please provide complete copies of the consolidating financial statement workpapers (income statements and balance sheets) for the HEI financial statements issued publicly for calendar 2007. Include in your response the most detailed available stand-alone income statements and balances sheets for each legal entity within HEI for each period/date, as well as details regarding elimination entries and any reclassifications made in preparing consolidated public financial statements.

HECO Response:

The requested information is provided on the attached pages 2 through 10.

HAWAIIAN ELECTRIC COMPANY, INC.
CONSOLIDATED REPORT 1 HISTORY FOR UTILITIES
December 2007

	<u>HECO</u>	<u>HELCO</u>	<u>MECO</u>	<u>RHI</u>	<u>UBC</u>	<u>ELIMINATIONS</u>	<u>HECO CONSOL</u>
R Residential	437,992,641	147,935,121	127,313,261				713,241,023
G General Service	80,892,148	140,627,517	32,110,994				253,630,659
H Coml Cook, Heat, Ref	7,661,346	4,448,179	6,426,653				18,536,178
J Genl Svc Demand	363,867,023	0	78,603,772				442,470,795
K General Service	0	0	0				0
P Large Power	482,910,648	66,254,949	103,132,570				652,298,167
Public Hwy Lighting	6,878,936	1,417,772	1,550,784				9,847,492
U General Service	523,275	0	0				523,275
Other Operating Revenues	4,410,392	727,996	1,271,822				6,410,210
OPERATING REVENUES TOTAL	1,385,136,409	361,411,534	350,409,856	0	0	0	2,096,957,799
Fuel Oil	525,555,558	74,964,384	173,598,687				774,118,629
Purchased Power	368,765,775	134,918,831	33,275,518				536,960,124
FUEL OIL & P.P. EXPENSES TOTAL	894,321,333	209,883,215	206,874,205	0	0	0	1,311,078,753
Other Operation	27,807,001	7,982,963	9,367,526				45,157,490
Transmission	4,519,976	776,332	554,880				5,851,188
Distribution	10,666,823	1,631,199	2,780,919				15,078,941
Customer Accounts	12,254,512	3,976,237	3,061,415				19,292,164
Customer Service	22,601,812	2,495,486	4,397,075				29,494,373
Administrative	71,006,811	16,097,911	12,068,208				99,172,930
OTHER OPERATIONS EXPENSES TOTAL	148,856,935	32,960,128	32,230,023	0	0	0	214,047,086

	HECO	HELCO	MECO	RHI	UBC	ELIMINATIONS	HECO CONSOL
Production	41,000,022	14,051,802	17,637,703				72,689,527
Transmission	5,845,366	1,442,907	1,522,262				8,810,535
Distribution	14,907,816	5,044,538	3,484,655				23,437,009
Administrative	454,440	180,933	190,989				806,362
MAINTENANCE EXPENSES TOTAL	62,207,644	20,700,180	22,835,609	0	0	0	105,743,433
Public Service Company	81,488,918	21,308,322	20,482,935				123,288,175
Franchise Royalty	34,027,308	8,964,115	8,693,792				51,595,215
P.U.C. Fees	6,824,292	1,805,278	1,743,516				10,473,086
FICA, Unemployment, Other	6,584,471	1,297,829	1,396,022				9,280,322
TAXES OTHER THAN INCOME TOTAL	129,014,989	33,273,544	32,318,265	0	0	0	194,606,798
State Income - Current	3,016,143	1,000,836	1,056,127				5,072,906
- Deferred	(2,420,055)	(241,230)	(1,037,652)				(3,698,937)
Federal Income - Current	32,275,844	10,376,892	12,114,009				54,766,545
- Deferred	(16,292,670)	(1,891,223)	(5,822,756)				(24,006,649)
Net Federal ITC Deferred	0	0	0				0
Net State ITC Deferred	1,089,530	288,492	634,392				1,992,414
INCOME TAXES TOTAL	17,848,592	9,533,567	6,944,120	0	0	0	34,126,279
Interest on Long Term Debt	27,258,096	6,974,934	8,378,889				42,612,919
Amort on Net Bond Prem & Exp	1,536,010	418,833	481,979				2,439,822
Dividends owed by Trust 1	0	0	0				0
Interest to Assoc Cos	2,199,089	2,863,267	781,980		0	(2,473,755)	3,350,591
Other interest charges	4,266,157	318,545	280,912				4,865,614
INTEREST CHARGES TOTAL	36,263,352	10,575,379	9,903,770	0	0	(2,473,755)	53,268,746
Other Inc & Ded - Other Taxes	(2,590)	0	(440)				(3,030)
- Federal	(1,214,927)	3,760,517	(101,089)		0		2,444,501
- State	(222,157)	687,637	(18,485)		0		446,985
- ITC	0	297,823	0				297,823
Investment Income	2,765,475	405,478	347,958			(2,473,755)	1,045,156
Other Income & Gain	7,895,344	283,304	222,132				8,210,780
Other A & G Expenses	(1,194,985)	(11,745,886)	(98,647)	(83,045)	(46,727)		(13,169,290)
OTHER INCOME/DEDUCTIONS, NET	7,826,180	(6,301,127)	351,429	(83,045)	(46,727)	(2,473,755)	(727,065)
Depreciation Expense	78,971,519	30,093,978	28,015,427				137,080,924
AFUDC for Equity Funds	4,403,980	460,944	354,670				5,219,574
AFUDC for Borrowed Funds	2,145,478	234,406	171,769				2,551,653
Equity in Earnings of Heco Cap Trusts *	100,516	0	0				100,516
Dividends on Preferred Stock	1,079,907	533,750	381,250				1,994,907
Dividends on Common Stock	27,084,000	0	9,900,000				36,984,000
OTHER INCOME STMT. ITEMS	113,765,380	31,323,078	38,823,116	0	0	0	183,931,574
BALANCE TO COMMON	32,248,252	8,252,016	11,785,055	(83,045)	(46,727)	0	52,155,551

* Effective 1/04

	HECO	HELCO	MECO	RHI	UBC	ELIMINATIONS	HECO CONSOL
Plant & Equipment	2,529,629,407	835,089,621	798,313,608				4,163,032,636
Accumulated Depreciation	(988,732,472)	(324,517,134)	(333,863,144)				(1,647,112,750)
Plant Acquisition Adjustment	0	0	1,785,138				1,785,138
Amortization of Adj	0	0	(1,744,128)				(1,744,128)
Property Held - Future Use	3,592,519	129,122	2,633,044				6,354,685
Plant Work in Progress	114,227,491	28,262,382	10,688,757				151,178,630
Investment in Assoc. Cos.	412,457,875	0	0			(410,911,475)	1,546,400
Other Property Total	5,423,082	81,718	201,594				5,706,394
Cash	188,705	3,068,407	773,246	197,975	435,000		4,664,333
Temporary Investments	13,842	0	0				13,842
Customer Accounts Receivable	98,560,927	27,233,651	21,507,921				147,302,499
Accrued Unbilled Revenues	82,616,916	16,820,356	14,938,396				114,375,668
Other Accounts Receivable	6,901,890	2,850,669	3,128,537				7,633,217
Allowance for Bad Debts - Billed	(431,560)	(679,458)	(79,796)			(5,247,879)	(1,190,814)
Allowance for Bad Debts - Unbilled	(66,920)	(25,082)	(9,163)				(101,165)
Allowance for Bad Debts - Other	(245,000)	(369,593)	(103,900)				(718,493)
Notes Rec. - Assoc. Cos.	36,600,000	0	2,000,000			(38,600,000)	0
T & D / General Materials and Supplies	15,723,176	4,403,696	14,130,582				34,257,454
Fuel Oil Stock	57,288,378	12,483,771	22,089,100				91,871,249
Other Current Assets	6,946,182	1,238,658	1,304,043				9,488,883
Unamort. Debt Expenses	10,554,933	2,458,098	2,621,575				15,634,606
Prelim. Survey Charges	0	0	0				0
Regulatory Assets	208,034,145	40,663,238	35,292,650				284,990,033
Other	23,479,507	5,589,676	5,850,300				34,919,483
TOTAL ASSETS	2,623,763,023	652,792,796	601,458,360	197,975	435,000	(454,759,354)	3,423,887,800

Other Asset (per HWR96X report)	23,479,507	3,111,611	5,336,230
Rec'd from other notes rec	0	2,478,065	514,070
Adjusted other asset	23,479,507	5,589,676	5,850,300
Note receivable (per HWR96X report)	36,600,000	2,478,065	2,514,070
Rec'd other notes rec	0	(2,478,065)	(514,070)
Note receivable - assoc cos.	36,600,000	0	2,000,000

267,300,912 CBS

284,990,033 CBS

193,424,469 CBS

4,678,175 CBS

267,300,912 CBS

284,990,033 CBS

193,424,469 CBS

4,678,175 CBS

267,300,912 CBS

284,990,033 CBS

	HECO	HELCO	MECO	RHI	UBC	ELIMINATIONS	HECO CONSOL.
Common Stock	85,387,140	21,773,150	15,826,020	781,000	435,000	(38,815,170)	85,387,140
Stock Premium & Expense	299,213,830	78,868,827	79,093,732			(157,963,559)	299,213,830
AOCI (a/c #211)	1,156,742	122,193	222,466			(344,659)	1,156,742
Retained Earnings	724,704,455	101,055,790	113,378,409	(599,384)	(46,727)	(213,788,087)	724,704,455
Pref'd Stk - Not Subj. to Mand. Red.	22,293,140	7,000,000	5,000,000			34,293,140	22,293,140
Pref'd Stk - Subj. to Mand. Red.	0	0	0			0	0
First Mortgage Bonds	0	0	0			0	0
Promissory Note - Sp Purp Rev Bonds	550,517,921	141,184,874	164,311,059			856,013,854	550,517,921
Funds on Deposit - Trustee	(14,407,300)	(5,374,300)	(2,679,900)			(22,461,500)	(14,407,300)
Long-Term Debt Assoc. Cos.	31,546,400	10,000,000	10,000,000			51,546,400	31,546,400
Other Long-Term Debt	0	0	0			0	0
Current Portion Long-Term Debt	0	0	0			0	0
Preferred Stock - Sinking Fund	0	0	0			0	0
Bank Loans							
Commercial Paper	28,791,136	0	0			28,791,136	28,791,136
Borrow, From Assoc. Cos.	2,000,000	36,600,000	0			0	2,000,000
Drafts & Checks Payable	34,751,932	12,527,777	3,661,993			(38,600,000)	34,751,932
Fuel Oil Payable	28,590,525	3,119,659	8,678,913			40,389,097	28,590,525
Trade Accounts Payable	34,356,319	6,162,500	6,045,070			46,563,889	34,356,319
Interest Payable	9,543,380	2,369,581	2,658,656			(162,868)	9,543,380
Dividends Payable	231,087	0	79,427			310,514	231,087
Taxes Accrued - Income	26,600,850	5,283,591	6,807,907			38,692,348	26,600,850
Taxes Accrued - Other	92,431,478	30,096,681	28,416,802			150,944,961	92,431,478
Other A/P & Accruals	41,792,103	9,834,616	11,194,111	16,359	46,727	(5,085,011)	41,792,103
Deferred Income Taxes	130,572,597	17,790,583	13,749,483			182,112,663	130,572,597
Investment Tax Credits	32,664,641	12,940,760	12,813,953			58,419,354	32,664,641
Customer Advances	920,687	33,648,041	5,007,446			39,576,174	920,687
Other Deferred Credits	102,954,099	18,325,780	22,461,464			143,741,343	102,954,099
Regulatory Liabilities	180,725,231	46,459,610	34,421,066			261,605,907	180,725,231
CONTRIB. IN AID OF CONSTR.	176,424,632	63,002,079	60,310,281			299,736,992	176,424,632

TOTAL CAPITAL & LIABILITIES 2,623,763,025 652,792,792 601,458,360 197,975 435,000 (454,759,354) 3,423,887,798

Other A/P & Accruals (per HWR96X rpt) 107,388,277 21,187,815 27,192,964
Reclass nonqualified pension long term liability to non-current (update in Dec) (3,731,192)
Reclass retirement long term liability to other deferred credits (24207000) (61,864,982) (11,353,199) (15,998,853)
41,792,103 9,834,616 11,194,111

Other deferred credits (per HWR96X rpt) 37,357,925 6,972,581 6,462,611
Reclass nonqualified pension long term liability from current 3,731,192
Reclass retirement long term liability from Other A/P & Accruals (24207000) 61,864,982 11,353,199 15,998,853
102,954,099 18,325,780 22,461,464

Accounts Payable 152,613,953
Interco payable (see elimination wkst) 378,786
152,992,739

Note A
CBS

Other liabilities 489,173,085
Interco payable (see elimination wkst) (378,786)
488,794,299

CBS

Note A: Represents intercompany payable included "Other A/P and Accruals" which is classified as "Other liabilities." As such, amount is reclassified by HEI to "Accounts Payable" for HEI Financial Reporting purposes.

17. Consolidating financial information (unaudited)

Consolidating balance sheet

	December 31, 2007						
(in thousands)	HECO	HELCO	MECO	RHI	UBC	Reclassifications and Eliminations	HECO Consolidated
Assets							
Utility plant, at cost							
Land	\$ 28,833	4,982	4,346	--	--	--	\$ 38,161
Plant and equipment	2,504,389	830,237	796,600	--	--	--	4,131,226
Less accumulated depreciation	(988,732)	(324,517)	(333,864)	--	--	--	(1,647,113)
Plant acquisition adjustment, net	--	--	41	--	--	--	41
Construction in progress	114,227	26,262	10,690	--	--	--	151,179
Net utility plant	1,658,717	536,964	477,813	--	--	--	2,673,494
Investment in wholly owned subsidiaries, at equity	410,911	--	--	--	--	(410,911) [2]	--
Current assets							
Cash and equivalents	203	3,069	773	198	435	--	4,678
Advances to affiliates	36,600	--	2,000	--	--	(38,600) [1]	--
Customer accounts receivable, net	98,129	26,554	21,429	--	--	--	146,112
Accrued unbilled revenues, net	82,550	16,795	14,929	--	--	--	114,274
Other accounts receivable, net	6,657	2,481	3,025	--	--	(5,248) [1]	6,915
Fuel oil stock, at average cost	57,289	12,494	22,088	--	--	--	91,871
Materials & supplies, at average cost	15,723	4,404	14,131	--	--	--	34,258
Prepayments and other	6,946	1,239	1,305	--	--	--	9,490
Total current assets	304,097	67,036	79,680	198	435	(43,848)	407,598
Other long-term assets							
Regulatory assets	209,034	40,663	35,293	--	--	--	284,990
Unamortized debt expense	10,555	2,458	2,622	--	--	--	15,635
Other	30,449	5,671	6,051	--	--	--	42,171
Total other long-term assets	250,038	48,792	43,966	--	--	--	342,796
	\$2,623,763	652,792	601,459	198	435	(454,759)	\$3,423,888
Capitalization and liabilities							
Capitalization							
Common stock equity	\$ 1,110,462	201,820	208,521	182	388	(410,911) [2]	\$ 1,110,462
Cumulative preferred stock-not subject to mandatory redemption	22,293	7,000	5,000	--	--	--	34,293
Long-term debt, net	567,657	145,811	171,631	--	--	--	885,099
Total capitalization	1,700,412	354,631	385,152	182	388	(410,911)	2,029,854
Current liabilities							
Short-term borrowings-nonaffiliates	28,791	--	--	--	--	--	28,791
Short-term borrowings-affiliate	2,000	36,600	--	--	--	(38,600) [1]	--
Accounts payable	97,699	21,810	18,386	--	--	--	137,895
Interest and preferred dividends payable	9,774	2,370	2,738	--	--	(163) [1]	14,719
Taxes accrued	119,032	35,380	35,225	--	--	--	189,637
Other	41,792	9,835	11,194	16	47	(5,085) [1]	57,799
Total current liabilities	299,088	105,995	67,543	16	47	(43,848)	428,841
Deferred credits and other liabilities							
Deferred income taxes	130,573	17,791	13,749	--	--	--	162,113
Regulatory liabilities	180,725	46,460	34,421	--	--	--	261,606
Unamortized tax credits	32,664	12,941	12,814	--	--	--	58,419
Other	103,876	51,972	27,470	--	--	--	183,318
Total deferred credits and other liabilities	447,838	129,164	88,454	--	--	--	665,456
Contributions in aid of construction	176,425	63,002	60,310	--	--	--	299,737
	\$2,623,763	652,792	601,459	198	435	(454,759)	\$3,423,888

Consolidating statement of income

Year ended December 31, 2007

(in thousands)	HECO	HELCO	MECO	RHI	UBC	Reclassi- fications and Elimina- tions	HECO Consolidated
Operating revenues	\$1,385,137	361,411	350,410	—	—	—	\$2,096,958
Operating expenses							
Fuel oil	525,555	74,965	173,599	—	—	—	774,119
Purchased power	368,766	134,919	33,275	—	—	—	536,960
Other operation	148,857	32,960	32,230	—	—	—	214,047
Maintenance	62,208	20,700	22,835	—	—	—	105,743
Depreciation	78,972	30,094	28,015	—	—	—	137,081
Taxes, other than income taxes	129,015	33,274	32,318	—	—	—	194,607
Income taxes	17,648	9,534	6,944	—	—	—	34,126
	1,331,021	336,446	329,216	—	—	—	1,996,683
Operating income	54,116	24,965	21,194	—	—	—	100,275
Other income							
Allowance for equity funds used during construction	4,404	461	354	—	—	—	5,219
Equity in earnings of subsidiaries	19,907	—	—	—	—	(19,907) [2]	—
Other, net	7,927	(6,299)	349	(83)	(47)	(2,474) [1]	(627)
	32,238	(5,838)	703	(83)	(47)	(22,381)	4,592
Income before interest and other charges	86,354	19,127	21,897	(83)	(47)	(22,381)	104,867
Interest and other charges							
Interest on long-term debt	29,310	7,625	9,029	—	—	—	45,964
Amortization of net bond premium and expense	1,539	419	482	—	—	—	2,440
Other interest charges	4,415	2,531	392	—	—	(2,474) [1]	4,864
Allowance for borrowed funds used during construction	(2,146)	(234)	(172)	—	—	—	(2,552)
Preferred stock dividends of subsidiaries	—	—	—	—	—	915 [3]	915
	33,118	10,341	9,731	—	—	(1,559)	51,631
Income before preferred stock dividends of HECO	53,236	8,786	12,166	(83)	(47)	(20,822)	53,236
Preferred stock dividends of HECO	1,080	534	381	—	—	(915) [3]	1,080
Net income for common stock	\$ 52,156	8,252	11,785	(83)	(47)	(19,907)	\$ 52,156

Consolidating statement of retained earnings

Year ended December 31, 2007

(in thousands)	HECO	HELCO	MECO	RHI	UBC	Reclassi- fications and Elimina- tions	HECO Consolidated
Retained earnings, beginning of period	\$700,252	92,836	111,536	(516)	—	(203,856) [2]	\$700,252
Net income for common stock	52,156	8,252	11,785	(83)	(47)	(19,907) [2]	52,156
Adjustment to initially apply FIN 48	(620)	(44)	(33)	—	—	77 [2]	(620)
Common stock dividends	(27,084)	—	(9,900)	—	—	9,900 [2]	(27,084)
Retained earnings, end of period	\$724,704	101,044	113,388	(599)	(47)	(213,786)	\$724,704

HAWAIIAN ELECTRIC INDUSTRIES, INC. AND SUBSIDIARIES

Consolidating Schedule - Income (Loss) Information

Year ended December 31, 2007

(in thousands)

	Holding Companies *	Hawaiian Electric Company, Inc. and subsidiaries	American Savings Bank, F.S.B. and subsidiaries	HEI Inc. Investments, Inc.	HEI Properties, Inc.	Pacific Energy Conservation Services, Inc.	The Old Oahu Tug Services, Inc.	Reclassifications and Eliminations	Consolidated
Revenues								Dr. (Cr.)	
Electric utility	\$ -	2,106,314	-	-	-	-	-	-	\$ 2,106,314
Bank	-	-	425,495	-	-	-	-	-	425,495
Other	761	-	-	-	-	-	-	-	4,609
Equity in net income of subsidiaries	110,930	-	-	3,785	1,623	140	113	1,813 (1)	-
	111,691	2,106,314	425,495	3,785	1,623	140	113	110,930 (2)	2,536,418
Expenses									
Electric utility	-	1,975,729	-	-	-	-	-	-	1,975,729
Bank	-	-	341,506	-	-	-	-	(21) (1)	341,485
Other	15,319	-	-	194	44	221	53	(359) (1)	15,472
	15,319	1,975,729	341,506	194	44	221	53	(380)	2,332,686
Operating income (loss)									
Electric utility	-	130,585	-	-	-	-	-	-	130,585
Bank	-	-	83,989	-	-	-	-	(21)	84,010
Other	96,372	-	-	3,591	1,579	(81)	60	112,384	(10,863)
	96,372	130,585	83,989	3,591	1,579	(81)	60	112,363	203,732
Interest expense—other than on deposit liabilities and other bank borrowings	(26,594)	(53,268)	-	(4)	-	-	(18)	(1,349) (1)	(78,556)
Allowance for borrowed funds used during construction	-	2,552	-	-	-	-	-	21 (1)	2,552
Preferred stock dividends of subsidiaries	-	(915)	-	-	-	-	-	1,080 (3)	(1,890)
Allowance for equity funds used during construction	-	5,219	-	-	-	-	-	(105) (1)	5,219
Income (loss) before income taxes	69,778	84,173	83,989	3,587	1,579	(81)	42	112,010	131,057
Income taxes (benefit)	(15,001)	30,937	30,882	(1,164)	594	-	30	-	46,278
Income (loss) before preferred stock dividends of HECO	84,779	53,236	53,107	4,751	985	(81)	12	112,010	84,779
Preferred stock dividends of HECO	-	1,080	-	-	-	-	-	(1,080) (3)	-
Net income (loss) for common stock	\$ 84,779	\$ 52,156	\$ 53,107	\$ 4,751	\$ 985	\$ (81)	\$ 12	\$ 110,930	\$ 84,779

* Includes the accounts of Hawaiian Electric Industries, Inc. and HEI Diversified, Inc.

See accompanying notes to consolidated financial statements and report of independent registered public accounting firm.

HAWAIIAN ELECTRIC INDUSTRIES, INC. AND SUBSIDIARIES
Consolidating Schedule - Balance Sheet Information
December 31, 2007
(in thousands)

Assets	Holding Companies*	Hawaiian Electric Company, Inc. and subsidiaries	American Savings Bank, F.S.B. and subsidiaries	HEI Investments, Inc.	HEI Properties, Inc.	Pacific Energy Conservation Services, Inc.	The Old Oahu Tug Services, Inc.	Reclassifications and Eliminations	Consolidated
								Dr. (Cr.)	
Cash and equivalents	\$ 1,106	4,678	140,023	5	6	17	20	-	\$ 145,855
Federal funds sold	-	-	64,000	-	-	-	-	-	64,000
Notes receivable from affiliated companies	1,325	-	-	28,073	3,120	-	2,256	(34,774) (1)	-
Accounts receivable and unbilled revenues, net	1,538	267,301	27,234	89	10	6	7	(1,738) (1)	294,447
Available-for-sale investment and mortgage-related securities	-	-	2,140,772	-	-	-	-	-	2,140,772
Investment in stock of Federal Home Loan Bank of Seattle, at cost	-	-	-	-	-	-	-	-	97,764
Loans receivable, net	-	-	-	-	-	-	-	-	4,101,193
Property, plant and equipment, net	1,338	2,673,494	68,560	-	-	18	-	-	2,743,410
Regulatory assets	-	284,990	-	-	-	-	-	-	284,990
Other	38,929	193,425	138,867	-	1,942	-	119	(34,877) (2)	338,405
Goodwill, net	-	-	83,080	-	-	-	-	-	83,080
Investment in consolidated subsidiaries, at equity	1,717,562	-	-	-	-	-	-	(1,717,562) (2)	-
	\$ 1,761,798	3,423,888	6,861,493	28,167	5,078	41	2,402	(1,788,951)	\$ 10,293,916
Liabilities and stockholders' equity									
Liabilities									
Accounts payable	\$ 8,349	152,973	42,700	10	2	2	1	1,738 (1)	\$ 202,299
Deposit liabilities	-	-	4,347,260	-	-	-	-	-	4,347,260
Short-term borrowings—other than bank	97,763	28,791	-	-	-	-	-	34,774 (1)	91,780
Other bank borrowings	-	-	1,810,669	-	-	-	-	-	1,810,669
Long-term debt, net—other than bank	357,000	885,099	-	-	-	-	-	-	1,242,099
Deferred income taxes	17	162,113	9,446	18,638	-	-	-	34,877 (2)	155,337
Regulatory liabilities	-	261,606	-	-	-	-	-	-	261,606
Contributions in aid of construction	-	299,737	-	-	-	-	-	-	299,737
Other	23,242	488,814	56,654	5,085	(666)	17	262	-	573,409
	486,371	2,279,133	6,266,729	23,734	(664)	19	263	71,399	8,984,196
Minority interests	-	-	-	-	-	-	-	-	-
Preferred stock of subsidiaries - not subject to mandatory redemption	-	-	-	-	-	-	-	-	-
Stockholders' equity									
Common stock	-	34,293	-	-	-	-	-	-	34,293
Retained earnings (deficit)	1,072,101	384,501	325,467	9,080	3,968	975	2,443	726,534 (2)	1,072,101
Accumulated other comprehensive loss, net of income tax benefits	225,168	724,704	287,710	(4,647)	1,774	(953)	(303)	1,008,285 (2)	225,168
	(21,842)	1,157	(18,413)	-	-	-	(1)	(17,257) (2)	(21,842)
	1,275,427	1,110,462	594,764	4,433	5,742	22	2,138	1,717,562	1,275,427
	\$ 1,761,798	3,423,888	6,861,493	28,167	5,078	41	2,402	(1,788,951)	\$ 10,293,916

* Includes the accounts of Hawaiian Electric Industries, Inc. and HEI Diversified, Inc.

See accompanying notes to consolidated financial statements and report of independent registered public accounting firm.

**Explanations of Reclassifications and
Eliminations on Consolidating Schedules**

**Hawaiian Electric Industries, Inc.
and Subsidiaries**

As of and for the year ended December 31, 2007

- (1) Elimination of intercompany revenues, expenses, preferred stock dividends, receivables and payables and reclassification of interest.
- (2) Elimination of subsidiaries' earnings, investments in subsidiaries (carried at equity) and capital account transactions and balances not included in (1) above and reclassification of balances.
- (3) Reclassification of preferred stock dividends of Hawaiian Electric Company, Inc.

CA-IR-35

Please provide a complete and detailed description of the HEI/HECO budget process and cycle, indicating the time line for each individually significant budget activity/step throughout a typical year and identifying the documents produced at each step of such process/cycle. Provide specimen copies of each type of document routinely created within the most recently completed budget cycle, including but not limited to budget assumption statements, calendars, input forms, staffing documentation, presentation graphics and budget review/approval documentation.

HECO Response:

Please see HECO's response to CA-IR-26, Docket No. 2006-0386 for a complete and detailed description of the budget process and cycle for a typical year. See Attachment 1 for documents created for the most recently completed budget cycle. Included on page 33 of Attachment 1 are the 2007 Update and Budget Recycle instructions that refer to a list of non-project corrections/revisions that contains confidential information. The Company, however, will provide this list of non-project corrections/revisions on pages 34 to 52 after a Protective Order is issued in this proceeding. See HECO's response to CA-IR-49 for documents related to the 2009 test year budget.

INTEROFFICE CORRESPONDENCE



Hawaiian Electric Co., Inc.

June 1, 2007

To: Officers
Direct Reports to Officers

Subject: Instructions for Preparing the:

- 2007-2012 Project/Program Estimates
- 2007 update and 2008-2009 Non-Project/Non-Program Estimates

Transmitted herewith is information regarding the preparation of HECO's capital and operating budgets.

<u>Attachment:</u>	<u>Description:</u>
A	Budget Preparation Schedule
B	Budgeting Responsibilities Unique to an Organization
C	Reference Materials

This year's Budget Preparation Schedule can be found on Attachment A.

- Workshops will be held to help users in developing their budgets and answering questions regarding the codeblock. Workshops will be held in Classroom B on Tuesday June 12 and Wednesday June 13, from 8:00am to noon. See page three of attachment A for additional information, including class size limitation.
- Information regarding the Process Area meetings, which are scheduled for August 27 thru September 4, and the Officer Briefing Sessions, which are scheduled for September 7, 11, 18 and 21 and required forms will be forthcoming.

For the 2008-2012 capital budget, all capital projects, including programs, will need to be prioritized by July 23, 2007. Project lists will be distributed prior to that date and will be covered in a separate memo.

Please refer to Attachment B for any specific budget responsibilities unique to your organization.

As a reminder, we have placed the Budget Preparation Instructions, which include general guidelines, cost distribution reminders, capital project information and instructions for developing inter-company billing (ICB) estimates, on the HECO Intranet under Management Accounting. See Attachment C, Reference Materials, for additional information.

Please distribute this memo and attachments as appropriate. Please contact Sandy Lee (extension 7729 or e-mail) if there are any questions regarding the requirements or guidelines.

A handwritten signature in cursive script, reading "Tayne S.Y. Sekimura".

Tayne S.Y. Sekimura
Financial Vice President

Attachments

cc: Julie Payne
Lyle Matsunaga

Attachment A

BUDGET PREPARATION SCHEDULE

Preparation:

May 16 Estimates for Information Technology and Services (ITS):
ITS (Rick Stuller) issues memo regarding IT items departments need to budget.

Intercompany Billing (ICB) Schedule:

Jun 6 – 14 Provider of service develops estimate and inputs required information for ICBs in Pillar files. ICB reports, "ICB Direct Labor Cost", "ICB Direct Total Cost", and "ICB Labor Hours" are included in the Expenses Module of your Pillar files. Note that the "ICB Direct Labor Cost" and "ICB Direct Total Cost" reports do not include on-costs.

No later than Jun 14 Provider of service places appropriate Pillar file(s) in appropriate folder on the O:drive.

Jun 18 HECO Pillar Administrator consolidates files, provides HELCO/MECO/RHI with file containing ICB estimates and information, and provides non-utility contact persons with reports containing ICB estimates and information.

Jun 19 HELCO/MECO/RHI distributes ICB estimates and information to respective departments for review and approval.

Jun 19 – 28 Receiver of services approves ICB estimates on ICB report and sends a signed copy of the report to provider. For Utility Companies, also send a copy of the report to your Pillar Administrator. Revisions, if any, must be reflected in the Pillar files of the provider and receiver of services

Detail Budgeting - 2007-2012 Project & Program, and 2007 Update and 2008 -2009 Non-Project/Non-Program Estimates:

Jun 6 Pillar file distribution:

- Pillar Administrator distributes Project and Non-Project files to Department folders
- Consolidators, if applicable, distribute Project and Non-Project files to persons responsible for preparing budget

Jun 14 Complete 2008 & 2009 inter-company billing estimate:

- Users complete inter-company billing estimates
- Users place copy of completed Project and Non-Project files in the appropriate folder on the O: drive by 12 noon

Complete 2008 & 2009 labor estimates for 1st resource leveling:

- Users complete 2008 & 2009 labor estimates in Project (for project and program demand) and Non-Project (for non-project/non-program demand and RA supply) files
- Users place copy of completed Project and Non-Project files in the appropriate folder on the O: drive by 12 noon

Jun 15 Pillar Administrator distributes Resource Leveling Reports for review, analysis, and to aid in balancing RA resource supply and demand

Attachment A

Detail Budgeting - 2007-2012 Project & Program, and 2007 Update and 2008- 2009 Non-Project/Non-Program Estimates (cont'd):

- Jun 21 Complete revisions to 2008 & 2009 labor estimates for 2nd resource leveling:
- Users complete revisions to 2008 & 2009 labor estimates in Project (for project and program demand) and Non-Project (for non-project/non-program demand and RA supply) files
 - Users place copy of completed Project and Non-Project files in the appropriate folder on the O: drive by 12 noon
- Pillar Administrator distributes revised Resource Leveling Reports for review, analysis, and to aid in balancing RA resource supply and demand.
- Pillar Administrator distributes ViewBud RA file, which shows total Capital and O&M (including on-costs) for comparison purposes
- Jun 22 Organizations send their completed Summary of Employee Changes and Explanation of Employee Changes forms electronically to Sandy Lee
- Jun 26 Complete Project and Program budget & update:
- Users complete 2007 update and 2008-2012 project and program estimates in Project files
 - Users place copy of completed Project files in the appropriate folder on the O: drive by 12 noon
- Complete revisions to 2008 & 2009 labor estimates for 3rd resource leveling:
- Users complete revisions to 2008 & 2009 labor estimates in Project (for project and program demand) and Non-Project (for non-project/non-program demand and RA supply) files
 - Users place copy of completed Project and Non-Project files in the appropriate folder on the O: drive by 12 noon
- Pillar Administrator distributes FINAL Resource Leveling Reports for review, analysis, and to aid in balancing RA resource supply and demand
- Pillar Administrator distributes ViewBud RA file, which shows total Capital and O&M (including on-costs) for comparison purposes
- Pillar Administrator forwards to ITS a report showing projects demanding ITS resources.
- Jul 3 Complete Non-Project and Non-Program budget and update:
- Users complete 2007 update and 2008 & 2009 non-project/non-program estimates in Non-Project files
 - Users place copy of completed Non-Project files in the appropriate folder on the O: drive by 10 am
- July 12 - Process Areas meet to prioritize capital work. Non-Capital work will not be prioritized.
July 23 Budgets distributes list with cost estimates on July 12.
- July 23 Process Areas complete prioritization of capital work. Process Areas electronically submit prioritized list of work Sandy Lee.
- July 26 CBC meeting

Attachment A

Detail Budgeting - 2007-2012 Project & Program, and 2007 Update and 2008-2009 Non-Project/Non-Program Estimates (cont'd):

Review:

Jul 23 Pillar Administrator distributes Project and Non-Project files to Department folders (June recorded). Users generate and review reports in order to prepare for Process Area meetings (instructions forthcoming)

Aug 20 Organizations send completed forms for Process Area meetings electronically to Sandy Lee

Aug 27-Sep 4 Process Area meetings

Sep 7, 11, 18 Executive Review

Sep 21 Executive Review with Mike May

Oct 17 HECO submits earnings estimate to HEI

WORKSHOP SCHEDULE

Workshops have been created to help users develop their budgets and input estimates in Pillar and answer questions regarding the Code Block (RA, activity, location, indicator, project number, expense element combination). Your attendance at the Workshops is optional, and note that no formal presentations will be made. Please bring materials that will help you in developing your estimates. If you have Pillar questions, please make sure to place a copy of your Pillar file on your department shared drive so that the files may be accessed in Classroom B.

The Workshops will be held on the following days at Classroom B from 8am to 12 noon:

Tuesday, June 12
Wednesday, June 13

Reservations will be taken on a first-come, first-served basis. Note that only ten PCs are available so only ten individuals will be able to input their budget into Pillar at a time. To reserve a space, please e-mail Sandy Lee with the attendee(s) name, RA code, phone number, and first and second choice of date.

S. Li (Legal and Land & Rights of Way)

<u>Date Due</u>	<u>Description</u>
06/27/07	Forward to Stephanie Choo an estimate of cash payments and receipts by month for 2008 and 2009 covering the following items: <ul style="list-style-type: none">• Land and rights of way acquisitions
07/03/07	Include the following in your organizational budget, if applicable: <ul style="list-style-type: none">• EEO liability related expenses (<i>legal reserves - expense element 900</i>)

E. IFUKU

<u>Date Due</u>	<u>Description</u>
06/27/07	<p>Forward to Stephanie Choo an estimate of cash payments and receipts by month for 2008 thru 2012, covering the following items:</p> <ul style="list-style-type: none">• Cash Contributions in Aid of Construction• Customer Advances
07/03/07	<p>Include the following in your organizational budget, if applicable:</p> <ul style="list-style-type: none">• Revenues and expenses for temporary facilities (<i>activity 440; location OUT; indicator BT; expense element 905 [revenues] & activity 440; location OUT; indicator BT; expense element 150, 201, and/or 301 [expenses]</i>)

S. YOSHIDA

Date Due

Description

07/03/07

Include the following in your organizational budget, if applicable:

- Joint pole credits (*expense element 905*)
- Cable TV revenues (*activity 025; location OOP, indicator BO; expense element 905*)

K. MORIKAMI

Date Due

Description

06/27/07

Forward to Stephanie Choo an estimate of **cash payments and receipts by month** for 2008 thru 2012, covering the following items:

- Cash Contributions in Aid of Construction

D. GIOVANNI

Date Due

Description

07/03/07

Include the following in your organizational budget, if applicable:

- Revenue from Demineralized water sales (*activity 030; indicator BO; expense element 905*)
- General excise taxes related to Demineralized water sales (*activity 040; indicator BE; expense element 501*)

J. BEAVERS

<u>Date Due</u>	<u>Description</u>
06/27/07	<p>Forward to Stephanie Choo an estimate of cash payments and receipts by month for 2008 and 2009, covering the following items:</p> <ul style="list-style-type: none">• Rent payments for property leased by HECO (non T&D)• Rental income from HECO property• Proceeds from sale of land• Other receipts/payments
07/03/07	<p>Include the following in your organizational budget, if applicable:</p> <ul style="list-style-type: none">• Ward Avenue Cafeteria subsidy (<i>activity 935; indicator NE</i>)• Parking Revenue (<i>activity 025; location OUT, indicator BO; expense element 905</i>)• Bus subsidy (<i>activity 780</i>)

C. BARNES

Date Due

Description

07/03/07

Your organizational budget should include, if applicable:

- Transformer Rental Revenue (*activity 025; indicator BO; expense element 905*)
- Take home pool car program revenues (*activity 025; indicator BO; expense element 905*)
- Revenues generated from work performed for outside parties (*activity 030; indicator BO; expense element 905*)
- Revenues generated from work performed for outside parties - "below the line" (*activity 010; indicator BN; expense element 905*)
- General excise taxes related to "below the line" revenues (*activity 040; indicator BN; expense element 501*)

Attachment B

B. MUNGER

<u>Date Due</u>	<u>Description</u>
06/27/07	Receive from Patsy Nanbu, the amount of the Waiau Well Water project cost to amortize in 2008 and 2009.
07/03/07	<p>Your organizational budget should include, if applicable:</p> <ul style="list-style-type: none">• Amortization of Waiau Well Water project costs (Please coordinate with Patsy Nanbu) (<i>activity 121; expense element 901</i>)• Amortization of Kahe 7 project costs in 2008(<i>expense element 901</i>)• Amortization of RO Water project costs beginning 2009 (<i>expense element 901</i>)

A. SEKI

<u>Date Due</u>	<u>Description</u>
06/27/07	Forward to Stephanie Choo the calculation of EPRI dues for 2008 and 2009.
07/03/07	<p>Your organizational budget should include, if applicable:</p> <ul style="list-style-type: none">• EPRI contributions other than local R&D budget (coordinate with Management Accounting) (<i>activity 730</i>)• Local R&D costs (coordinate with Management Accounting) (<i>activity 731</i>)

G. HASHIRO

Date Due

Description

07/03/07

Your organizational budget should include, if applicable:

- IRP General Planning expenses for current cost (*activity 711, indicator NE*). Assumes that rate relief includes these costs in base rates.

P. NANBU

Date Due

Description

06/27/07

Forward to Brenner Munger the estimated amortization of the following:

- Waiau Well Water project costs (2008 and 2009)
- Kahe 7 (2008)
- RO pipeline (2009)

Forward to Stephanie Choo:

- Estimated amortization of gain on sale of utility property if applicable for 2008-2012
- Estimated tax rates for 2008 and 2009
- Amortization of regulatory assets:
 - Amortization of SFAS 109 Regulatory Assets for 2008-2012
 - Amortization of Other Regulatory Assets for 2008-2012
- Amortization of investment income differential
- Waiau Water Wells project - accrual of monthly carrying charge
- Amortization of e-Business costs
- Amortization of other deferred costs (other than e-Business, such as rate case costs, HR Suite, CIS, OMS, and Ellipse)
- Amortization of Preferred Stock Issue costs
- Non-utility depreciation for tax and book purposes

Attachment B

S. LOO

Date Due

Description

07/03/07

Your organizational budget should include estimates of revenues generated by month for 2008 and 2009 from work performed for outside parties, if applicable.

Include the following in your organizational budget, if applicable:

- Emission Fees (*activity 875*)
- Revenue from Contract Services - "below the line" (*activity 010; indicator BN; expense element 905*).
- General excise taxes related to "below the line" revenues (*activity 040; indicator BN; expense element 501*)

Attachment B

L. ROOSE

Date Due

Description

07/13/07

Forward to Ron Cox and George Willoughby the Production Simulation
Run results for 2008-2012

Attachment B

R. COX

Date Due

Description

07/24/07

Forward to George Willoughby **monthly** budgets of the following for 2008-2009:

- Purchased power expenses by supplier separating payments for capacity, non-fuel, etc.
- KWH purchases by supplier

Forward to Stephanie Choo and George Willoughby **monthly** budgets of the following for 2008-2009:

- Kalaeloa shortfall costs based upon the May 2007 sales budget update
- AES bonus payments based upon the May 2007 sales budget update
- Fuel inventory, based on the fuel oil consumption estimate, including barrels of fuel oil inventory at the end of each month, by plant site and by type of oil
- Fuel consumption budgets

07/24/07

Forward to George Willoughby **annual** budgets of the following for 2010-2012:

- Purchased power expenses by supplier separating payments for capacity, non-fuel, etc.
- KWH purchases by supplier

Forward to Dean Ueda and George Willoughby **annual** budgets of the following for 2010-2012:

- Kalaeloa shortfall costs based upon the May 2007 sales budget update
- AES bonus payments based upon the May 2007 sales budget update
- Fuel inventory, based on the fuel oil consumption estimate, including barrels of fuel oil inventory at the end of each month, by plant site and by type of oil
- Fuel consumption budgets

R. COX (continued)

<u>Date Due</u>	<u>Description</u>
08/01/07	<p>Forward to Stephanie Choo an estimate of cash payments and receipts by month for 2008-2009 covering the following:</p> <ul style="list-style-type: none">• Fuel oil purchases• Throughput charges• Fuel handling charges• Rental income from the use of Barber's Point fuel tanks for storage by Tesoro or other parties• Pipeline facilities and maintenance charges• Payments to Chevron USA for operation and maintenance of the Barber's Point fuel storage facility• Costs of testing and inspection relative to the purchase of fuel oil• Projected payments for purchase of line materials, both for inventory and for special order items
07/03/07	<p>Include the following in your organizational budget, if applicable:</p> <ul style="list-style-type: none">• Purchase power contract legal expenses

D. YAMAMOTO

<u>Date Due</u>	<u>Description</u>
08/24/05	Forward to Stephanie Choo an estimate of cash receipts by month for 2008 and 2009 for the following: <ul style="list-style-type: none">• Service establishment fees• Field collection fees• Returned check charges• Late payment and bad debt rates (annual)• Revenue protection revenues
06/27/07	Forward to Stephanie Choo an estimate for 2008 and 2009 for the following: <ul style="list-style-type: none">• Interest on Customer Deposits
07/03/07	Include the following in your organizational budget, if applicable: <ul style="list-style-type: none">• Bad debt expense - please coordinate with Lorna Pang• Low Income Matching expenses (<i>activity 617</i>)• Payment protection insurance• Amortization of CIS project cost (<i>expense element 901</i>)
07/03/07	Include direct labor hours for ITS personnel for CIS project. Do not budget ITS labor as expense element 451, instead use expense element 150. The adjustment for non-payroll related on-costs (customer installations and corporate administration) from deferred to expense will be made by the Pillar Administrator.

C. PEREZ

Date Due

Description

07/03/07

Your organizational budget should include, if applicable:

- Revenues (*activity 015; indicator BN; expense element 905*) and expenses (*activity 140; indicator BN*) for work performed for outside parties (Energy Efficiency Projects, BOA, etc.)
- General excise taxes related to "below the line" revenues (*activity 040; indicator BN; expense element 501*)
- All Electric Heat Pump Incentive expenses (*activity 140; indicator NN*)

R. LEE

Date Due

Description

07/03/07

Your organizational budget should include, if applicable:

- All Electric Subsidy Promotion expenses (*activity 140; indicator NN*)

Attachment B

A. HEE

Date Due

Description

06/27/07

Forward to Stephanie Choo:

- Solar Saver loans and repayments

07/03/07

Your organizational budget should include, if applicable:

- DSM expenses (*activity 713-714*)
- Solar Saver administrative expenses (recoverable in a surcharge)

07/03/07

Forward to Joanne Takamura:

- Utility incentives for 2008-2012

J. PRICE

<u>Date Due</u>	<u>Description</u>
07/03/07	<p>Forward to Stephanie Choo an estimate for 2008 and 2009 for the following:</p> <ul style="list-style-type: none">• Salary reduction amount and FICA savings due to Flex Plan• Electric discount for retirees• Incentive Compensation Program estimates• Workers' Compensation Total Cost estimate
07/03/07	<p>Your organizational budget should include if applicable:</p> <ul style="list-style-type: none">• Amortization of HR Suite project cost (Expense Element 901)• Amortization of pension asset
07/03/07	<p>Include direct labor hours for ITS personnel for HR Suite project. Do not budget ITS labor as expense element 451, instead use expense element 150. The adjustment for non-payroll related on-costs (customer installations and corporate administration) from deferred to expense will be done by the pillar administrator.</p>

Attachment B

R. STULLER

<u>Date Due</u>	<u>Description</u>
07/03/07	Your organizational budget should include, if applicable: <ul style="list-style-type: none">• Other telecommunication related revenues including facilities' attachment (<i>expense element 905</i>) & expenses (<i>activity charged may vary</i>)
07/03/07	Work with respective project managers for CIS, Ellipse UNIX migration, Ellipse upgrade and HR Suite projects. Do not include these projects in your ITS charge-backs as they will be budgeted by the respective project managers.

D. MATSUURA

Date Due

Description

07/03/07

Your organizational budget should include, if applicable:

- Amortization of Rate Case expenses (*expense element 901*)

R. YOUNG

Date Due

Description

07/03/07

Your organizational budget should include, if applicable:

- Amortization of OMS project cost (*expense element 901*)

S. SEU

Date Due

Description

07/03/07

Your organizational budget should include, if applicable:

- Amortization of DSG project cost for the following: (*exp element 901*)
 - Queens Medical Center
 - Department of Transportation

Attachment C

REFERENCE MATERIALS

The following reference materials are available on the HECO Intranet under Management Accounting:

Document	Information Included
Planning & Budgeting:	
2008 and 2009 Budget Preparation Instructions	Guidelines, cost distribution reminders, capital project information, other items, instructions for developing inter-company billing estimates.
Code Block Reference Manual:	
Code Block: Changes from Previous Release Responsibility Areas Activities Locations Indicators Projects (Non-Controlled Default) Expense Elements	Codes, descriptions, and instructions on use.
Code Block Business Rules and Frequently Asked Questions	General rules covering Freight, Bulk Postage and Mail; Clearing Accounts, research and development, etc.
Std Labor Class & On-Costs:	
Labor Classes	Labor Classes & Related Job Titles/Position Descriptions (Merit and Bargaining Unit). Please note that merit and bargaining unit are on separate tabs.
On-Cost and Vehicle Rates	Listing of On-Cost Rates and Vehicle Rates
Vehicle Classes	Vehicle Class Descriptions
Policies & Procedures:	
Pillar User Manual	Instructions on Using Pillar
Validating Code Block Combinations	Instructions on using the VB Application to validate the code block combinations entered in Pillar
Vehicle Costing Procedures	December 1, 2001 IOC from Ernest Shiraki

The following forms are available on the HECO Intranet under Management Accounting:

Document
Cash CIAC Form
Budget Input Forms (Non-Project / Non-Program)

Resp Area (RA)
Labor Class

Prepared by _____
Date _____[illegible]

Holidays - 1/1, 2/18, 3/21, 5/26, 6/11, 7/4, 8/15, 9/1, 10/13, 11/4, 11/11, 11/27, 12/24 (12/25, 12/31) (12)

Available hours per employee

NOTE: Total NonProject Demand hours may NOT equal Total Supply hours due to Project Demand hours (which are budgeted in the Project file)

Resp Area (RA)

Prepared by _____
Date _____[illegible]

(DEPT)

SUMMARY OF EMPLOYEE CHANGES

[illegible]

EXPLANATION OF EMPLOYEE CHANGES

2008	NUMBER OF EMP				
	TERM/ REPL	INC	(DEC)	HECO TEMP	MONTH
	0	0	0	0	

INTEROFFICE CORRESPONDENCE



Hawaiian Electric Co., Inc.

October 4, 2007

To: Officers
Direct Reports to Officers

Subject: 2007 Update and Budget Recycle (2008-2009 Non-Project and 2008-2012 Project/Program Budget)

Thank you for your flexibility, contributions and support of this year's planning effort. The review process has been completed and you will now have an opportunity to make any necessary corrections and/or revisions to the 2008-2009 non-project and 2008-2012 project/program budget (in conjunction with our scheduled 2007 update). Non-project corrections/revisions are identified on the attached list. Please contact Lorna Pang at ext. 7823 prior to making any changes that are not on the attached list. For project/program revisions, please contact Gail Shimabukuro at ext. 7922 should you have any questions. Following are guidelines to assist you in completing your budgets:

- Confirm plant addition dates for capital projects
- Review your resource leveling reports to confirm resources and demands

The following schedule has been developed for the recycle:

Oct 5 **Pillar file distribution:**
Pillar Administrator distributes Pillar files to Department folders

Oct 12 **Complete revised 2008-2009 labor estimates for 1st resource leveling**
Noon Users complete revisions for 2008-2009 labor estimates in Project and Non-Project files and place a copy in the appropriate folder on the O:drive.

Pillar Administrator distributes 2008-2009 Resource Leveling

Oct 19 **Complete revised 2008-2009 labor estimates for 2nd resource leveling**
Noon Users complete revisions for 2008-2009 labor estimates in Project and Non-Project files and place a copy in the appropriate folder on the O:drive.

Pillar Administrator distributes 2008-2009 Resource Leveling

Oct 25 **Complete revised 2008-2009 non-project and 2008-2012 project/program estimates:**
Noon Users complete the 2008-2009 non-project and 2008-2012 project/program estimates
Users place copy of completed files in the appropriate folder on the O: drive

Please distribute this memo as appropriate. Should you have any questions, please call Joanne Takamura at x5615.

A handwritten signature in dark ink, appearing to read 'Tayne Sekimura'.

Tayne Sekimura
Financial Vice President

Attachment

cc: Lyle Matsunaga (w/o attachment)
Julie Payne (w/o attachment)

Pages 34 through 52 of Attachment 1 are confidential and will be provided
after a Protective Order is issued in this proceeding.

CA-IR-36

Please provide a complete copy of the most recently completed Federal and State income tax returns for HECO, including all supporting schedules.

HECO Response:

See Attachment 1 for HECO's stand alone pro forma federal and Hawaii income tax returns for 2006, which are extracted from the HEI consolidated income tax returns. Attachment 1 contains confidential information and is provided subject to Protective Order.

Attachment 1 is confidential and will be provided
after a Protective Order is issued in this proceeding.

CA-IR-37

Please provide a complete copy of employee benefit documentation associated with each existing employee health, welfare or retirement plan, in the form currently provided to employees to advise them of such benefits.

HECO Response:

The requested information is voluminous and is available for inspection at HECO's Regulatory Affairs Division office, Suite 1301, Central Pacific Plaza, 220 South King Street, Honolulu, Hawaii. Please contact Dean Matsuura at 543-4622 to make arrangements to inspect the requested information.

CA-IR-38

- a. Has the Company initiated any individually significant efficiency or cost reduction programs since January 1, 2006?
- b. If affirmative, please identify and describe each such program and provide copies of all reports analyses, projections, workpapers and other documentation related to same.

HECO Response:

- a. Yes. The Company has initiated efficiency or cost reduction programs since January 1, 2006. HECO is continuously evaluating and reviewing programs that can result in increased efficiency or cost reductions.
- b. Examples of such programs implemented since January 1, 2006 include the Siemens Power Strategic Alliance. HECO finalized a Strategic Alliance Agreement with Siemens Power Transmission & Distribution Inc., Transmission Products Division in October 2006. This strategic alliance agreement provides HECO with several benefits including competitive pricing and reduced lead times. The benefits to HECO are enumerated within the Agreement. Upon issuance of a protective order in this proceeding, HECO will provide a copy of this agreement as Attachment 1 of this response, subject to the terms of the protective order.

Another example is the medical plan changes implemented since January 1, 2006 that require increased cost sharing by employees. These revisions are discussed in HECO T-13 beginning on page 40, line 20, and on page 23, lines 14-17. These changes have contributed towards controlling HECO's medical plan costs for active employees and retirees.

Required monthly contributions by employees under the FlexPlan have also increased since January 1, 2006, which result in lower HECO costs. Please see

HECO-WP-1353, page 19, and the discussion on Flex Credits Less Prices in HECO T-13, beginning on page 37, line 5. The cost reductions are reflected in HECO-1301, page 1, line 14.

Since January 1, 2006, HECO has implemented the Energy Management System and the Outage Management System which help HECO maintain and improve reliable system operations and service to its customers (HECO T-7, pages 20-26 in Docket No. 2006-0386).

HECO also continues to implement programs that it initiated prior to January 1, 2006. Examples of these programs include the System and Equipment Reliability Prioritization and Predictive Maintenance programs found in HECO's responses to CA-IR-30 in Docket No. 2006-0386 and CA-IR-12 in Docket No. 04-0113.

Attachment 1 contains confidential information and will be provided after a Protective Order is issued in this proceeding.

Attachment 1 is voluminous and available for inspection at HECO's Regulatory Affairs Division office, Suite 1301, Central Pacific Plaza, 220 South King Street, Honolulu, Hawaii. Please contact Dean Matsuura at 543-4622 to make arrangements to inspect the document. An electronic copy of the requested information is being provided.

CA-IR-39

Ref: HECO-WP-101(G); Non-Labor Projected Test Year Expenses
Block/Account/Department/RA/Activity/Location/EE.

Please provide a report showing an alternative sort of Non-Labor budgeted expenses for the test year, compared to actual historical years 2003 through 2007 and budget 2008, using the following sort sequence: Block of Accounts/ RA/ Expense Element/ Activity. Please provide your response in hard copy and electronic (excel) format.

HECO Response:

The report of recorded direct non-labor charges for 2003 through 2007 and the 2008 through 2009 budget by block of accounts, account, RA, expense element and activity (see Attachment 1) is voluminous and available for inspection at HECO's Regulatory Affairs Division office, Suite 1301, Central Pacific Plaza, 220 South King Street, Honolulu, Hawaii. Please contact Dean Matsuura at 543-4622 to make arrangements to inspect the requested information. While the Company provided a compact disc containing electronic (excel) files of the 2003-2007 recorded and 2008-2009 budget data for labor and non-labor costs which support the Rate Case Summary Reports provided in HECO-WP-101 on July 14, 2008, an electronic version of the requested report and supporting data (in excel format) is being provided.

Attachment 1 is voluminous and available for inspection at HECO's Regulatory Affairs Division office, Suite 1301, Central Pacific Plaza, 220 South King Street, Honolulu, Hawaii. Please contact Dean Matsuura at 543-4622 to make arrangements to inspect the document. An electronic copy of the requested information is being provided.

CA-IR-40

Ref: HECO-WP-101(F); Direct Labor Projected Test Year Expenses
Block/Account/Department/RA/Activity/Location.

Please provide a report showing an alternative sort of Direct Labor budgeted expenses for the test year, compared to actual years 2003 through 2007 and budget 2008, using the following sort sequence: Block of Account/ RA/ Expense Element/ Activity. Please provide your response in hard copy and electronic (excel) format.

HECO Response:

The report of recorded direct labor charges for 2003 through 2007 and the 2008 through 2009 budget by block of accounts, account, RA, expense element and activity (see Attachment 1) is voluminous and available for inspection at HECO's Regulatory Affairs Division office, Suite 1301, Central Pacific Plaza, 220 South King Street, Honolulu, Hawaii. Please contact Dean Matsuura at 543-4622 to make arrangements to inspect the requested information. While the Company provided a compact disc containing electronic (excel) files of the 2003-2007 recorded and 2008-2009 budget data for labor and non-labor costs which support the Rate Case Summary Reports provided in HECO-WP-101 on July 14, 2008, an electronic version of the requested report and supporting data (in excel format) is being provided.

Attachment 1 is voluminous and available for inspection at HECO's Regulatory Affairs Division office, Suite 1301, Central Pacific Plaza, 220 South King Street, Honolulu, Hawaii. Please contact Dean Matsuura at 543-4622 to make arrangements to inspect the document. An electronic copy of the requested information is being provided.